

Yards and Transit Co. occurred and the following board was chosen: Nathaniel Thayer, Boston, a railroad magnate; J. N. McCullough, Pittsburg, Pres. Pittsburg, Ft. Wayne & Chicago R. R.; John B. Sherman, Chicago; John Newell, Cleveland, Pres. Lake Shore R.

Continued on Eighth Page

The Horse.

DOCTORS DISAGREE.

At a farmers' institute in Wisconsin recently, Mr. Brooks read a very instructive paper upon breeding horses. In it he thus refers to the American trotter:

"If there are any gentlemen present who have not fully decided what kind of a horse to breed, and are waiting for more light on the subject, allow me to put in my plea for my favorite, which is the American trotting horse. In so doing I do not antagonize any other breed; nor am I here to champion any particular family of trotting blood. A combination of Hambletonian, Mambrino Chief, the Clays and Morgans, so intermingled as to produce a horse that will weigh 1,200 or 1,300 pounds is my ideal horse—one that I have thought much about, and labored many years to produce. Do not get the idea that I am going to champion the track horse, and advise farmers to breed him. It is the larger part of the breed to which I call your attention—horses that have plenty of bone and muscle to do any farm work with ease; that have the courage not to be outdone in a hard day's work on the farm or a long drive on the road; that have the brain that is susceptible of being educated into a companion for a man, his most willing and faithful servant, the peer of all animal creation, the best gift of a divine Father to his children. I do not wonder the Arab loved best, next to his Creator, his favorite horse."

On the other side we quote the following from a writer in the *Rural World*, whose favorite is the Cleveland Bay:

"There are a few of our American trotters that have given us satisfaction in breeding this class of horses, but it is to be regretted that they are comparatively few. The complaint is often made by farmers who have only one or two brood mares that they cannot get two colts alike from the same mare and stallion. The reason for this is found in that although both may have a good pedigree and be fine individuals, there being no uniformity in their ancestors, there are no fixed characteristics to be transmitted and any one of their many ancestors' peculiarities in form and color are liable to crop out at any birth."

"The average thoroughbred is too small for producing coadjutors in a large majority of our native mares, else they would be very desirable. The time will no doubt come when the size of our mares will allow it, but it will require several generations of crossing with larger stock first."

What this writer says about Cleveland Bays may be all right, but we object decidedly to his criticism of the trotting horse. They are being bred to as high a standard and upon as well established rules as the thoroughbred, and the propensity of those which are well bred cannot be surpassed by any other race of horses. Where is there a sire that surpasses Electioneer in planting his peculiar instinct in his progeny? Or take the whole Wilkes family, their trotting instincts crop out when coupled with any class of mares. And these trotting sires are only a sample of the remarkable propensity of the American trotter in thousands of individual instances to stamp his characteristics upon his progeny under all circumstances. In speaking of the American trotter we refer to those families which have been bred as such by men who understand the principles of breeding, not the half bred produce of an unknown dam from a well bred sire."

Floors for Horse Stables.

As long as we can remember, the question as to the best floors for horse stables has been discussed. We have tried clay and ordinary dirt, but they did not prove satisfactory. Holes would be dug almost daily for the forefeet, the urine would gather there, and unless great care was taken to fill them up and to smooth over the soil daily and wash the horses' feet, scratches would follow, and probably what is called quarter crack result, which is likely permanently to injure the animals. Sand and even sawdust have been recommended, but they were clearly not desirable, we never tried either. We began with plank flooring, were dissatisfied from using it, but have returned to it and found it preferable to the others. We prefer hemlock, a double two inch plank, with the front plank kept well covered with straw at all times for the forefeet, and at nights to be well bedded with straight rye-straw. We have found no disadvantages from the flooring; the feet have not suffered so far as we can discover. Some object to the planks, first, because they are hard, and others that they become slippery and the horse is liable to fall and strain himself in getting up; but, if we remember rightly, the plank roads were not objected to on account of their hardness or slipperiness; and as to slipping, if the floor is a little inclined the water is carried back, whence a slight gutter, also inclining somewhat, either removes it from the stable to the outside, or is allowed to pass under the floor through small holes in the gutter. But where these arrangements have not been made, a covering of sifted coal ashes over the floor will prevent the slipping.

We have known floors in stalls to be made of boards or planks turned up on an edge, which is about as hard as anything can be, also, of flagstones, mortar, and even asphaltum, all of which we should suppose might prove injurious to the animal, but we have never heard that they were. Hemlock planks, laid as we have mentioned, will prove, take all the circumstances into consideration, about as satisfactory as anything that can be substituted, and far nearer and not more expensive.—*Germanstown Telegraph*.

Haltering a Colt.

Get the colt to follow an old horse into a loose box, or some out-house, and while there give him a feed of oats. When the colt begins eating remove the other animal, and endeavor to handle the youngster about the head and ears; allow him to smell the halter, and leave it lying beside him when eating. If he seems likely to prove troublesome, this treatment may require to be repeated for a few days. When proceeding to halter him, be careful to use a leather halter, and see that it sits loosely and comfortably on him. Do not on any account make use of a rope halter for breaking, as should the animal begin struggling the pain caused him by the cords of the rope and the tightening of the alipnoose will certainly make him worse to manage. Should he show any fidgetiness, a little patting will quiet him. Once haltered, let the old horse be led on before him, and he will likely follow quite peacefully. In the course of a day or two he will be found to lead quite quietly in the halter by himself. It is sometimes customary to tie colts up in the stable after

halting, if only for a short time, to accustom them to the practice, and if a little feeding is given to keep them quiet, no fault may be found with doing so; but if kept tied up for days, as is sometimes done, the custom is a mistaken one, and the worst that could be adopted. As a rule, colts should not be tied up to stalls until thoroughly broken in and kept regularly at work.—*Farming World*.

Horse Gossip.

It is one hundred and nine years since the English Derby was established.

Dr. A. H. Thompson, of Lapeer, has sold his trotter, Hard Luck, to Temple Emery, of Bay City, for \$500.

W. T. Chester announces that the additions to the 2:30 list in 1888 number 608 trotters and pacers, against 486 in 1887.

L. C. Webb, of Mason, Ingham County, has sold his yearling colt by Pilot Medium, dam by Louis Napoleon, to Mort Buck, of Charlotte, for \$1,000.

Robert Steele, of Philadelphia, has bought the young stallion Antiope 7818, for \$1,000. He was sired by Electioneer, dam, Columbine, by A. W. Richmond 1887; second dam Columbia (thoroughbred) by Bonnie Scotland.

The attention of Michigan breeders is called to the stakes advertised in the *Farmers' Week* by the Michigan State Agricultural Society. Nominations for these stakes close March 15th. The terms of entry are liberal.

Sisson & Lillie, of Grand Rapids, have sold to E. B. Travis, of La Porte, Ind., the two-year-old bay stallion Count Louis 8781, by Louis Napoleon 207, dam Thoughtless, by Happy Thought 2426. The reported price was \$1,000.

S. A. Brown & Co., of Kalamazoo, have traced the colt Corcoran 9656, by Endymion 4294, dam Cora D., by Magna Charta 165, to R. Williams, of Upper Sandusky, Ohio, for the three-year-old filly Embassy, by Ambassador, dam by Philadelphia.

Mr. H. Richmond, of Jackson, has sold to George B. Perrin, of Chicago, the brood mare Tiny Wilson, dam of Haven Boy, pacer, 2:15 1/2, and Kindergarten, pacer, 2:26. She is in foal to a son of Louis Napoleon, and will be bred to Ruby Wilkes, son of Young Jim.

Mr. J. L. Mills, of Bancroft, Shawansee County, advertises all his stock for sale, as will be seen in another column. Among them is the grand imported Clydesdale stallion Gen. Johnston 5083. Both in individuality and merit he is one of the best specimens of the breed ever brought into the State. We hope he will fall into good hands, and be kept in Michigan. There are heaps of money in that fallow if well handled.

The owner of Proctor Knott has a great campaign laid out for him next season. He is to run for and win the \$2,000 stakes at Nashville, Tenn., the Clark stakes at Louisville, Ky., the Latonia Derby and the Chicago Derby. Then he is to have a chance in at least two other races, which Sam Bryant, his owner, thinks will be easy to pull in with him. Sam should remember that it is the unexpected which happens, in horse racing as in everything else.

REINA VICTORIA, the celebrated trotting brood mare, died last week, at Terre Haute, Ind. Several months ago she brought \$7,500, the highest figure ever paid at public auction for a brood mare. She was to foal within a few days. She was taken with pneumonia a few weeks before she died. Reina Victoria was foaled in 1875, and was by Ryedyk's Hambletonian, dam Hyacinth, by Volunteer, granddam Dexter's dam, by Seely's American Star. She was the dam of Budia, record, 2:28 1/2, and of Princeton, record 2:19 1/2.

There seems to be a growing demand for straight tracks, but it certainly does not come from the public. It isn't a straight track that the American people are clamoring for; it is straight racing. Give us less conservatism and more backbone in judges' stands. Just so; but the public won't get them, all the same. The sporting press has made horsemen believe that it is all right to practice fraud if they don't get caught at it. See how they brag about the sharp tricks of a Span, or a Turner, or a Van Ness, in which the public were "skinned" in good style by such worthies! And the young drivers are anxious to beat the sharp tricks of the older ones so as to have their smartness praised, and be called "great generals." It should be great frauds.

LONGFELLOW, the great son of imported Longfellow, heads the list of winning sires in 1888, his get carrying off \$114,936. The Bard secured \$10,040 of that amount. Longfellow is now 22 years old, and his best stock have been sired since he was 15 years old. As a race horse he was undoubtedly the best seen for years in this country, and at all distances. He is a large horse—over 16 hands, and weighing 1,250 pounds. He ran some sensational races, beating every opponent excepting in the race where he broke down; and that race proved him one of the greatest horses ever seen on a course, the last few rods being run with one of his hoofs turned under him so that he was running upon his broken pastern. Since his got began to appear on the turf in 1876, they have won \$218,188. He will probably be a useful horse for five or six years yet, his sire lasting until 23 years old.

The American Cattleman announces that it has decided to publish "The Horse-Breeders' Trotting Registry." This publication will embrace the pedigrees of standard-bred trotters and pacers, also the pedigrees of non-standard trotters and pacers, under the supervision of a board of censors; also an annual trotting and pacing calendar and a complete list of 2:30 trotters and pacers. Perhaps there is a place for such a work, but we doubt it. The more "registries" there are the more confused will be the records. The history of registries of other animals proves this. While the registry published by Mr. Wallace may not be all it should be, it is improving every issue, and it will be easier to improve it than to build up a new one. However, time will tell whether it is a good thing or not to the horsemen or the publishers, the two parties most interested in its success.

The Blood.

Is the source of health; therefore, to keep well, purify the blood by taking Hood's Sarsaparilla. This medicine is peculiarly designed to act upon the organs and tissues of the body. It has a specific action, also, upon the secretions and excretions, and assists nature to expel from the system scrofula, humors, impure particles, and effete matter through the lungs, liver, bowels, kidneys and skin. It effectually aids weak, impaired, and debilitated organs. A trial will convince you that it does possess peculiar curative powers,

The Farm.

Using Fertilizers.

When fertilizers were first introduced it was the universal custom to apply them to the hill, and this practice still prevails in many localities, and with several kinds of crops. The efficiency of any fertilizer is greatly impaired when improperly used, and this causes the farmer to place less dependence and importance to this grand adjunct to successful agriculture. The man who fails to get good results on first trial can hardly be convinced that fertilizers are necessary, or even important, factors in growing crops. We find that in many parts of the country farmers would not use it on corn if furnished free of charge. They say it "fires" the crop, and if the season is a little dry reduces the yield below the average of same land when fertilizers are not used. We know this is a mistaken idea, as a rule, and is the result of improper application of commercial manures.

Corn should never be fertilized in the hill by hand, nor should the corn drill with fertilizer attachment which distributes in the drill, ever be used. As a rule, let your fertilizer be distributed evenly all through the surface soil, say an inch below the surface. The only exception we would make to the rule would be that of melons, but even in this case the distribution should embrace a circle at least three feet in diameter. On corn, tobacco, potatoes, cotton or garden crops the distribution should be uniform all over the field. When the application is made directly in the hill, the rootlets of growing plants cluster around this reservoir of plant food, and if a short season of drought follows, the moisture in that spot is soon exhausted and the plant is stunted, if not ruined altogether. If the distribution is properly made the feeding rootlets reach out naturally all through the surface soil. They receive the necessary amount of stimulant to push forward their growth, while drought has no more effect upon them than it has upon the plants on adjacent lands where fertilizers are not used. For making proper distribution the wheat drill with fertilizer attachment is the best implement that can be used. This we can use on most crops either before or after planting. It is more convenient to apply it before the crop is planted, but if the season is far advanced and work pressing it can be delayed until the crop is in, or even wait till ready for the first cultivation. In this latter case chain up the middle hoe of the wheat drill, so that the young and tender plants will not be disturbed, then straddle a row and proceed with the work.

If farmers who have used fertilizers on spring crops and decided that they lost money in the operation would adopt the above plan, we have no doubt but what the result would prove satisfactory, and show them the error of their way. The practice with many market gardeners is to make several applications of quick-acting commercial manures along through the season. It is only by close observation and careful experiment that we reach established facts and positively determine what course is best to pursue in using fertilizers. What we need in this country is more thinking, investigating farmers. More thought should go into their work than is usually customary among tillers of the soil.

Drift Soil and Wheat.

After the different strata of rock which form the crust of the earth had been made there still remained much to be accomplished before the surface of the earth was in its present condition. An earth which was composed of solid rock with only the slightest surface soil made up of the fragments of the local rock would not afford a very comfortable habitation for man and beast. There must be a deep fertile soil covering the solid rock before there could be a sufficient luxuriant vegetation to support comfortable life. There are regions of the earth's surface where the soil is shallow and regions where it is poor. A soil may be poor because it is composed of the debris of a rock whose chemical composition is not the best suited to sustain vegetable life. It may be shallow because the rock has not been pulverized to a sufficient extent to make it deep.

It is well known that through Ohio, Illinois, Indiana, Iowa and Michigan the soil is particularly good. The region is world famous as the home of luxuriant crops. The soil is known to be practically inexhaustible. The use of the artificial fertilizers is almost unknown. The reason for this comes from the depth of the soil, its general characteristics and its chemical composition. Around Indianapolis, which may be taken as a fair exponent of this region, the soil varies from 70 to 90 feet before the rock is reached. Then the character of the soil has much to do with its fertility. In this region we find on the surface a finely pulverized rich earth. Under this lies a clay which is in places entirely impervious to water; in other places almost so. What is the result? During the winter and early spring when the snows are melting and heavy rains falling, the earth acts like a gigantic sponge. It soaks and holds in its self immense quantities of water. The clay below the surface prevents the water from draining away, and during the summer months there is always an abundance of moisture, and the result is the first factor necessary for the production of good crops, a moist soil, one that does not readily "feel" the effects of long continued periods without rain.

Another factor in the soil in the region mentioned is its chemical composition. It is composed of the pulverized fragments of rock from almost every geological period and from many different localities. In it are found fragments of granite, of different sandstones and limestones; of gneiss, rock, etc. There are found traces of gold, and occasionally precious stones. The soil is proved by the larger fragments which are capable of being verified to be composed of a mixture which has been brought here from many different localities, and the broken fragments of the original rock which underlies the surface bear only a small relation to the soil as a whole. The result is this: Instead of being composed of a limited number of factors which are soon exhausted, the

soil has in it all the parts necessary to the growth of luxuriant crops without the use of artificial help.

It may be interesting to our readers to know how this immense deposit of rich soil was brought from so many different localities, and left for our farmers to grow large crops of corn and wheat upon. Among the many questions which have disturbed the geologists, perhaps none offered more difficulty in solution than this. There have been many ideas expounded in regard to this formation, which is known as drift, but after much discussion the scientific world has generally accepted what is known as the glacial theory. This theory explains more of the drift phenomena than any other, and while it is not absolutely satisfactory, and there is much still to be accounted for, it will be the accepted theory until further discoveries either confirm it, or another is found which will account for more phenomena than it.

It is supposed that ages ago the ice cap which now surrounds the pole was, from some cause, much extended, and came south, covering the larger part of North America with an immense ice sheet, 5,000 or 6,000 feet thick, as far south as the 40th degree of latitude. This ice followed the movements of the smaller glaciers which we know today, the whole mass moving slowly southward, and melting at its southern limit, where the temperature was such that ice could no longer exist. This mass of moving ice covered mountains and valleys alike, and in its movement ground up and carried with it and under it immense quantities of the surface rock. As the ice melted, and the glaciers receded to their home in the North, this pulverized earth from the different parts of the North, was left covering the earth, and thus was formed the incomparable soil of this region. The drift formation covers New England, Canada and the Middle States as far south as the 39th and 40th parallels. It is found west as far as Montana, although west of the Mississippi river its southern limit is farther north than the parallel named.

There are many theories to the cause of the southern movement of this ice sheet. Some have supposed that the earth's surface was raised from one to two thousand feet in the north and that the axis of the earth was changed. This change in the axis would produce a change of climate. But it is probable that a less startling change than an immense elevation of large tracts of the surface of the earth would account for the phenomena of glaciation. It is not possible to discuss the question here or the probability of the truth of the glacial theory.

In speaking of this drift formation, Prof. Collett, former state geologist of Indiana, says: "The mines of California may be exhausted, manufacturing may be overdone, banks may break and securities decline in value, but, with proper care, the farmer need not have any fears for the future. The peculiar adaptability of this soil to the growth of any of the cereals, or to stock raising, gives a variety of resources that, in all human probability, renders a total failure an impossibility."—*The Milwaukee*.

Symptoms of Pleuro-Pneumonia.

The lung, in its normal or healthy condition, is as soft and pliable as a piece of wet linen. The color is a delicate shade of pink. When affected by the inflammation in its first or acute stage, the portion of the lung where the germs have lodged solidifies, and is hard and unyielding. When out open a sort of thick liquid is exposed, and the color of the lung is mottled, resembling, somewhat, the appearance of cattle soap. As the disease progresses, the color darkens until it has the hue of liver. In a certain dairy it was found in every degree of advancement, from its first appearance of not more than 24 hours' growth, to a thoroughly developed case in which the putrid, matted, and enlarged organ had grown fast to the ribs, and eaten into the flesh.

When the animal is first attacked, it loses its appetite, the hair raises, the head droops, and if it be a milch cow she will drop off almost, if not entirely, all her milk. Should she live through the acute stage, she will appear to have recovered, her appetite and milk returning. Cases that are taken severely do not, as a rule, live long. When apparent convalescence commences, a cyst or wall is by nature thrown around the diseased part. Decomposition of the contents of the cyst then commences, and continues until it is entirely gone, and the decomposed matter is supposed to be absorbed by the system. During this process the germs of the disease are conveyed to the air by the bronchia, that lead from the sack to the bronchial tubes, and are thrown out by the expirations, and will infect anything of the bovine family. Thus, an apparently healthy animal may become a disseminator and infect not only living flesh, but the feed, the buildings, etc.—*Orange County Farmer*.

How Dairying Improves the Farm.

At a recent meeting of the Delaware (N. Y.) County Dairymen's Association Mr. J. D. Smith, of Meridith, told how he managed his farm and dairy. The following is a summary of Mr. Smith's practice:

With the usual care and feed the cows will not make to exceed 175 pounds of butter in a year. His plan is to have these cows come fresh in the fall, and feed eight to twelve pounds of grain during the winter. Take the farm that would keep twenty cows on the old plan, it would keep twenty-five under this treatment the first year, and make 250 pounds to the cow as easily as 175 lbs. in the old way. The twenty-five cows would make 6,250 lbs. of butter, which at 25 cts. a pound would amount to \$1,562.50. The twenty cows would make 5,000 pounds of butter, which at 25 cts. a pound would amount to \$1,250. Now eight pounds of grain a day for 210 days at \$34 per ton will cost \$504 for twenty-five cows, leaving a balance of \$1,058.50 in favor of grain feeding. This is a nice profit for the first year, but it is of more importance in its future results. Twenty-one tons of feed go into the manure pile, this will warrant the keeping of 28 cows the second year. Figuring this as before the balance in favor of grain feeding will be \$368.18. This plan carried out for ten years would enable the farm to keep 35 cows the tenth year, with a profit of \$808.50 above the old plan of feeding 20 cows without grain.

It is safe, he thinks, to feed grain, and it will pay every time. The engine that brought them to town, if fed only a limited amount of fuel, would simply be able to

move itself along. It could draw no load, and be of no use—simply an expense. By a little extra fuel, however, more steam is generated, and enormous loads are moved. It is the extra fuel that does the effective work—without it all would be lost. Just so with the cow; it is the extra food that makes the profit; if fed only enough to support her there is a necessary loss. Here he took occasion to continue his simile a little further, and explained that you must have a good machine to do good work, and the same applies to cows—all the grain in the West won't make milk from some cows.

As practical evidence in favor of this argument Mr. Smith stated that 30 years ago, his farm would keep only 15 cows and a team. Last winter he had 50 head of horned cattle and four horses. This increase was due to the plan of feeding grain, and increasing the fertility of the soil by so doing. His neighbor, John McDougal, had carried the plan farther than he has, and has met with correspondingly greater results.

In the discussion that followed it was the universal opinion that cows would make 50 pounds more butter by coming fresh in early winter than in early spring. But to make profit cows must have care, warm stables and good food. Some thought that a cow would be worn out quicker if heavily fed, others thought that you could not hurt a cow by judicious feeding and proper care.

Agricultural Items.

The average butter production of the cows of New York State is 130 pounds, quite too little for profit. The standard of the Jersey cattle club is 300 pounds per year.

At the Honorable, N. Y. Farmers' Institute, Mr. N. F. Underwood spoke of a pasture on his place which had not been plowed for sixty years, and is still a productive meadow.

Wood ashes are one of the best fertilizers for the potato, especially on a soil deficient in potash. The ash of the potato tuber very plainly indicates the importance of a supply of potash, as fifty-nine per cent of the ash is potash.

Canada exports about \$170,000 worth of unleached ashes annually. The Toronto *Globe* strongly deprecates this sale of so valuable a fertilizer, and says farmers make a great mistake in selling the essentials for a good crop because they are "too poor" and want the money.

COWS grown in England and Scotland weigh 50 pounds to the bushel, while the same seed grown in this country will give but 40 pounds, and in three seasons reach the usual weight of oats in this country, which is 28 to 30 pounds to the bushel. The reason is that the climate of Great Britain is better adapted to the development of this grain than ours.

It is estimated, says the *American Cultivator*, that the area of unclaimed swamp and marsh land in the United States that can be drained and brought under cultivation is equal to that of all the cultivated lands, or nearly three hundred million acres. Much of this land could be reclaimed without much difficulty or expense, and would make farm land of great value.

A CORRESPONDENT of the *Inter-Ocean* says from \$25,000 to \$50,000 have been expended in the purchase and fitting up of an apparatus for the purpose of warming water for stock, in the expectation that it would pay in the increased production of milk. The same amount expended in better stable accommodations, or in supplying water to the cattle without exposing them to the inclemency of the weather, would have paid a better percent.

THE Bureau of Animal Industry has issued a circular to farmers and stockmen, notifying them that if their cattle are found to be inoculated with virus of any contagious disease, especially that of pleuro-pneumonia, and it becomes necessary to destroy any of them, the owners will receive no compensation for their loss. In Pennsylvania, the State authorities endorse the action of the Bureau, and abandoned inoculation and depend upon slaughtering all diseased animals.

PROF. E. W. STEWART, in the *Courier-Gleaner*, says raw potatoes are fed to horses as a laxative, and if fed to any considerable extent the laxative effect will be too great, and will cause the horse to grow poor, instead of improving his condition. Cooked potatoes may be fed to horses, and they have about the same effect as corn meal. The potato contains such a large percentage of starch that it is more benefited by cooking than any of the roots. He does not think potatoes a profitable food for horses at more than 15 cents per bushel, because of the labor of cooking them.

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LIST OF PRINCIPAL NON-CURABLES: 1. Fever, 2. Consumption, 3. Inflammation, 4. Dropsy, 5. Rheumatism, 6. Gout, 7. Scrofula, 8. Syphilis, 9. Gravel, 10. Bilious Colic, 11. Yellow Fever, 12. Cholera, 13. Typhoid, 14. Typhus, 15. Erysipelas, 16. Erysipelas, 17. Erysipelas, 18. Erysipelas, 19. Erysipelas, 20. Erysipelas, 21. Erysipelas, 22. Erysipelas, 23. Erysipelas, 24. Erysipelas, 25. Erysipelas, 26. Erysipelas, 27. Erysipelas, 28. Erysipelas, 29. Erysipelas, 30. Erysipelas, 31. Erysipelas, 32. Erysipelas, 33. Erysipelas, 34. Erysipelas, 35. Erysipelas, 36. Erysipelas, 37. Erysipelas, 38. Erysipelas, 39. Erysipelas, 40. Erysipelas, 41. Erysipelas, 42. Erysipelas, 43. Erysipelas, 44. Erysipelas, 45. Erysipelas, 46. Erysipelas, 47. Erysipelas, 48. Erysipelas, 49. Erysipelas, 50. Erysipelas, 51. Erysipelas, 52. Erysipelas, 53. Erysipelas, 54. Erysipelas, 55. Erysipelas, 56. Erysipelas, 57. Erysipelas, 58. Erysipelas, 59. Erysipelas, 60. Erysipelas, 61. Erysipelas, 62. Erysipelas, 63. Erysipelas, 64. Erysipelas, 65. Erysipelas, 66. Erysipelas, 67. Erysipelas, 68. Erysipelas, 69. Erysipelas, 70. Erysipelas, 71. Erysipelas, 72. Erysipelas, 73. Erysipelas, 74. Erysipelas, 75. Erysipelas, 76. Erysipelas, 77. Erysipelas, 78. Erysipelas, 79. Erysipelas, 80. Erysipelas, 81. Erysipelas, 82. Erysipelas, 83. Erysipelas, 84. Erysipelas, 85. Erysipelas, 86. Erysipelas, 87. Erysipelas, 88. Erysipelas, 89. Erysipelas, 90. Erysipelas, 91. Erysipelas, 92. Erysipelas, 93. Erysipelas, 94. Erysipelas, 95. Erysipelas, 96. Erysipelas, 97. Erysipelas, 98. Erysipelas, 99. Erysipelas, 100. Erysipelas, 101. Erysipelas, 102. Erysipelas, 103. Erysipelas, 104. Erysipelas, 105. Erysipelas, 106. Erysipelas, 107. Erysipelas, 108. Erysipelas, 109. Erysipelas, 110. Erysipelas, 111. Erysipelas, 112. Erysipelas, 113. Erysipelas, 114. Erysipelas, 115. Erysipelas, 116. Erysipelas, 117. Erysipelas, 118. Erysipelas, 119. Erysipelas, 120. Erysipelas, 121. Erysipelas, 122. Erysipelas, 123. Erysipelas, 124. Erysipelas, 125. Erysipelas, 126. Erysipelas, 127. Erysipelas, 128. Erysipelas, 129. Erysipelas, 130. Erysipelas, 131. Erysipelas, 132. Erysipelas, 133. Erysipelas, 134. Erysipelas, 135. Erysipelas, 136. Erysipelas, 137. Erysipelas, 138. Erysipelas, 139. Erysipelas, 140. Erysipelas, 141. Erysipelas, 142. Erysipelas, 143. Erysipelas, 144. Erysipelas, 145. Erysipelas, 146. Erysipelas, 147. Erysipelas, 148. Erysipelas, 149. Erysipelas, 150. Erysipelas, 151. Erysipelas, 152. Erysipelas, 153. Erysipelas, 154. Erysipelas, 155. Erysipelas, 156. Erysipelas, 157. Erysipelas, 158. Erysipelas, 159. Erysipelas, 160. Erysipelas, 161. Erysipelas, 162. Erysipelas, 163. Erysipelas, 164. Erysipelas, 165. Erysipelas, 166. Erysipelas, 167. Erysipelas, 168. Erysipelas, 169. Erysipelas, 170. Erysipelas, 171. Erysipelas, 172. Erysipelas, 173. Erysipelas, 174. Erysipelas, 175. Erysipelas, 176. Erysipelas, 177. Erysipelas, 178. Erysipelas, 179. Erysipelas, 180. Erysipelas, 181. Erysipelas, 182. Erysipelas, 183. Erysipelas, 184. Erysipelas, 185. Erysipelas, 186. Erysipelas, 187. Erysipelas, 188. Erysipelas, 189. Erysipelas, 190. Erysipelas, 191. Erysipelas, 192. Erysipelas, 193. Erysipelas, 194. Erysipelas, 195. Erysipelas, 196. Erysipelas, 197. Erysipelas, 198. Erysipelas, 199. Erysipelas, 200. Erysipelas, 201. Erysipelas, 202. Erysipelas, 203. Erysipelas, 204. Erysipelas, 205. Erysipelas, 206. Erysipelas, 207. Erysipelas, 208. Erysipelas, 209. Erysipelas, 210. Erysipelas, 211. Erysipelas, 212. Erysipelas, 213. Erysipelas, 214. Erysipelas, 215. Erysipelas, 216. Erysipelas, 217. Erysipelas, 218. Erysipelas, 219. Erysipelas, 220. Erysipelas, 221. Erysipelas, 222. Erysipelas, 223. Erysipelas, 224. Erysipelas, 225. Erysipelas, 226. Erysipelas, 227. Erysipelas, 228. Erysipelas, 229. Erysipelas, 230. Erysipelas, 231. Erysipelas, 232. Erysipelas, 233. Erysipelas, 234. Erysipelas, 235. Erysipelas, 236. Erysipelas, 237. Erysipelas, 238. Erysipelas, 239. Erysipelas, 240. Erysipelas, 241. Erysipelas, 242. Erysipelas, 243. Erysipelas, 244. Erysipelas, 245. Erysipelas, 246. Erysipelas, 247. Erysipelas, 248. Erysipelas, 249. Erysipelas, 250. Erysipelas, 251. Erysipelas, 252. Erysipelas, 253. Erysipelas, 254. Erysipelas, 255. Erysipelas, 256. Erysipelas, 257. Erysipelas, 258. Erysipelas, 259. Erysipelas, 260. Erysipelas, 261. Erysipelas, 262. Erysipelas, 263. Erysipelas, 264. Erysipelas, 265. Erysipelas, 266. Erysipelas, 267. Erysipelas, 268. Erysipelas, 269. Erysipelas, 270. Erysipelas, 271. Erysipelas, 272. Erysipelas, 273. Erysipelas, 274. Erysipelas, 275. Erysipelas, 276. Erysipelas, 277. Erysipelas, 278. Erysipelas, 279

Horticultural.

CALIFORNIA RAISIN GROWERS.

They Hold a Convention, and Decide that American Brands Should Replace Foreign Marks on their Product.

A convention of raisin growers was held at San Francisco, on Saturday, January 19. Mr. B. N. Rowley, of San Francisco, president, and O. F. Pierce, of Talara, acted as Secretary.

Mr. Motherall stated the objects of meeting, which were as follows:

1. To adopt a uniform system of grading and packing, thereby raising the standard of the California pack two or three points.
2. The establishment of grades to be known as "California selected clusters" and "California selected bunch," to take precedence over our present high grades, known as "London layers" and "Dehesa clusters."
3. To remodel what we now term London layers, dropping the word "London" and substituting the word "California layers."
4. To drop entirely the Spanish emblem which we now use, "a crown," and substitute in its stead the "American eagle" or "star," establishing grades to be known as five eagles, four eagles, three eagles, etc.

5. To abolish the system now in vogue of contracting for vineyard-taking the entire crop of all kinds at one price. The grower who takes extra care and pains in producing fine large fruit, especially fine bunches and clusters, should receive proportionately more money for his fruit than the grower who is negligent and delivers small fruit and scrappy bunches.

6. To consider the proposition of buying by months, as was talked of last year. The grower should receive more money for his early deliveries than for his late ones. Raisins delivered in September or October are worth more money to the packer than raisins delivered in November.

Mr. Motherall then made a motion that the Convention leave to the Directors of the Dried Fruit Union the method of grading and packing, and suggested that a committee be appointed by the chairman to co-operate with the Committee on Grading and Packing to designate necessary marks and brands.

The following resolutions were then read and adopted:

WHEREAS, The yield of California's horticultural products is greater every year, and we must have greater outlet for the State to prosper; and whereas, the past season has shown that California raisins can compete in Europe with the Malaga products; and whereas, in order to bring this fact to the attention of the world be it

Resolved, That the assembled raisin growers and makers of California strongly urge our Legislators and Executive to pass and approve the bill appropriating \$250,000 to enable California to make a London exhibition; and be it further resolved, that a copy of these resolutions be forwarded to his Excellency, the Governor, through the Secretary of this Convention.

GARDENING FOR PROFIT.

[Paper read by Thos. Crafts, East Toledo, O., at the Adrian Farmers' Institute.]

Market gardening is simply carrying out on a larger scale the same principles that apply in the farm garden. It is a very easy thing to take any of the standard works on the growing of vegetables or small fruits and figure out a fortune from a small farm in a single season, but when we come to try to reduce the lessons we have learned from the books to practical use, the fortune is not so easily attained; in fact very frequently all that has been gained by the experiment is experience. Where expectation has been raised to such a pitch as it must be by reading many of these glowing accounts of great profits in horticulture, nothing but disappointment can be the result; for I do know from experience that these immense profits can not be obtained now if they ever could, not one time out of a thousand, and yet market gardening has been a profitable business in the past, is now, and will continue to be in the future; and while many who turn to it will find it only a source of profit as well as pleasure.

If any of you are thinking of going into the business of growing garden truck for other people, I would not say one word to discourage you, but I would say, go slow, feel your way, and as you find it profitable you can extend your operations; for bear in mind that you are entering into a contest with men who are already established in business, business men who have an experience gained by years of labor and observation, men who already have the markets that you wish to enter, and that you must capture if you would succeed. There is but one way that you can get on an equality with these men and that is by working your way up; with the man that is starting in business, it is in a great measure an experiment. Others who have been successful may tell him all they can, and show him all they can, and yet he has not got it learned until he has done the work and obtained the result for himself, and then just as he is clear out into the light, some little thing will come up that will knock his light clear out and leave him groping around in the dark. Go slow; experimenting on a large scale is expensive. I have seen more than one man with considerable means launch out brilliantly and in a great flourish, only to come out in the course of a few years poorer and wiser, either to abandon the business entirely, or to start from the bottom and build up, and that is where you have got to commence if you want to garden for profit. If you go to garden for pleasure and have got plenty of capital, it don't matter much where you commence, you will have the pleasure of spending your money.

In embarking in the business of growing garden truck for commercial purposes the first item of consideration is the market, the place where the products are to be disposed of, and the nearer the garden is to that market the more profitable it can be made; for where the market is distant there are so many contingencies to be met, that the profits obtained from one lot are frequently swallowed up by the losses on another. There are places no doubt that are particularly adapted to growing special crops, so that they may be grown profitably and shipped long distances to market, but where the crop is one that can be grown over a large area of country, there is always danger of more being grown than can be sold at fair prices during the season, and as a consequence much of the crop will go to waste or be forced on the market at prices so low that there is no profit in it for the grower. Of course at such times the man who has the market at his door has a great advantage

over the one that has to ship. He supplies the market, other things being equal, and the outsider stays out. We all know that there is a limit to the demand for all such products, while with many crops they may be grown to an almost unlimited extent, so that in growing specialties for distant markets there will always be an uncertainty in regard to the price our crop will bring, and this is also true of the home market to some extent. What experience I have had in market gardening has been gained in growing vegetables for the Toledo market during the last fifteen years. The first of my gardening commenced with growing cauliflowers, through growing a few for my own use. I found that I could grow them much finer than any that were offered in the market, and had a monopoly of the business for several years; most of them I sold at three dollars per dozen, and the finest ones at four dollars. When I had more than Toledo would take I would ship them south, sometimes they brought even higher prices than I was getting at home, and at other times they would hardly pay expenses, and at last I found out that the men that were handling them for me were not dealing fairly by me, and I would only ship on orders. While I had the business to myself of course it was profitable, but competition brought down prices, until now they will not average more than one-third what they were fifteen years ago, yet cauliflowers are still one of our most profitable crops. That was the beginning of my gardening; since then I have branched out into a general line of market truck, growing a certain amount of staple products each year, regardless of what prices might be, and this I believe is the most sure and safe way to success.

There is another thing that I have urged some of our gardeners to do and that is instead of putting forth every effort to grow stuff to sell, and then have to buy all their supplies, they should grow as much as possible of the feed that they need for their stock, and thus while their gross receipts would not be so large, I believe their books would show a larger balance. The first point to be aimed at in growing garden truck for market is earliness; it is the early bird that gets the worm there and no mistake, and the gardener who would succeed must pull every string to get in ahead. The difference of a few days in the maturing of a crop, is often the difference between success and failure. It is impossible for the gardener of the present day to succeed without the aid of glass; if he does not use it for the purpose of maturing crops he must have it in order to get his plants forward and ready for far more operations as soon as the season is far enough advanced. The earliness and quality of the crop depend very much on the condition of the plants that he sets out; if they are good stocky plants, with good roots and are given the chance, they will grow right from the word go. The amount of money that can be made by the use of glass in the growing of vegetables varies. Some seasons it is more, others less; one thing is certain, the prices for products grown under glass are the main crop, two years ago the present winter it brought the gardeners 25 cents per pound, last winter it sold for 20 cents per pound, the present winter it has sold all winter for 15 cents. I do not think that it can be sold in the winter time at a much lower figure, and yield the producer any profit. The amount of glass used in the vicinity of Toledo has been multiplied many times during the last ten years; about that time I commenced with three sash, last year I had 250 glass sash and about the same area covered with cotton; this year I have 400 sash besides the cotton. When I commenced using glass I knew nothing whatever about the business. I made a hotbed and succeeded in growing a few plants. I used the hotbed for starting plants for a few years with varying results, and then built a small greenhouse, which I found much better adapted to the starting of seeds, and growing of plants in the earlier stages of development than a hotbed, for the very simple reason that I was able to control the temperature of the house more perfectly. I have now two small houses, each 10 by 40 feet, that I use for sowing all the seeds for growing my early plants, and handling the plants. Most of the plants we transplant twice before putting them in the hotbed or out of doors. We usually commence making hotbeds from the middle of February to the first of March, but the present year we have good plants ready to commence at any time, and shall do so the first of February if the weather is favorable. I have light board shutters with which to cover the glass during frosty nights, and they are a great help in forwarding the crop. With good plants we make a crop of lettuce or radishes in a hotbed in about six weeks, it depends much upon the amount of sunshine we get and as the days lengthen they grow much faster. The utmost care is required in the management of the beds; they must have air even in frosty weather when the sun is shining, and they must be aired in such a manner that the frosty winds will not blow in upon the plants. More plants are spoiled by keeping them too close than by giving them too much air, but extremes are to be guarded against as much as possible. In operations in the open ground the point to be aimed at is concentration. Concentrate your power and get all out of it there is in it; don't spread out too much. In growing garden crops the fertility of the soil is an absolute necessity, if that is lacking it must be sup-

plied and the more perfectly it is supplied the better will be the result. Now for instance, if I had four acres of land and only manure sufficient for one I would put it all on to one, even though I had to seed the other three to clover, and then by close planting and a succession grow my four acres of crops on the one acre. And one other thing that must not be lost sight of, if we want to get profit out of the market garden, and that is the quality of our product, while we are trying to grow all that we can make the land produce, and while we are trying to get it early, just a little ahead of our neighbors, let us try to get it a little better than they. The best will always sell, and in putting your product upon the market see that it is just what it purports to be; if it is a prime article see that it is prime all the way through. Honest, upright, square dealing on the market will pay.

Planting Evergreens.

A correspondent of the Orange County Farmer says:

If you desire a fine, beautiful hedge, or wish a clump of one variety of evergreens, plant the arbor vitae, using trees from three to four feet in height for the hedge, setting them three feet apart. If you wish to form a clump that will become more beautiful each year, select three nice trees of the arbor vitae, six feet in height, and set them six feet apart in the form of a triangle, and they will soon form an elegant clump. Mr. Charles H. Mead, of Cornwall, we think, can claim the privilege of having more of arbor vitae hedge on his place than any other place in Orange County. He certainly must have over two thousand feet, forming as it does a frame for the boundary lines of his land. It is indeed a beautiful sight at this time of the year. Mr. Mead takes great pride in this hedge and has it thoroughly trimmed and cared for each year. On the west side of his place he allows it to grow to a height of about fifteen feet, which shelters his place from the west winds which are very severe here during the fall and winter months. Around the rest of his place he trims it down to eight feet. This place seems even more beautiful in summer and one must see it to fully appreciate the effect the arbor vitae produces.

The Norway spruce is indeed a beautiful tree, and planted on either side of the carriage drive, or planted singly or in clumps with other trees, always makes a fine appearance. It can also be used to good advantage for hedge purposes. American, Austrian and Scotch pines are not so popular as the spruce or arbor vitae. Still in the adornment of any grounds they are entitled to a place, and in forming a contrast can be used very advantageously.

The Cultivation of Plums for Market.

S. D. Willard, of Geneva, read a most instructive paper on this subject before the Western New York Horticultural Society, in which he insisted that success can only be gained when good trees of varieties suited to a particular location are selected; when these varieties are adapted to the local market; when the orchard is carefully cultivated and liberally fed; and when a constant watchfulness is exercised against the attacks of insects and diseases. The plum is capricious in its likes and dislikes, and very often a variety which does well in one locality will fail a few miles away on soil of apparently the same kind. Markets are quite as variable. In one Damsons are more highly prized than choicer sorts, while in a neighboring town colored varieties are required to the exclusion of all others. The selection of varieties therefore depends on the proper solution of very many problems, and yet these points which are vital to success must be settled beforehand by the planter from such observations and inquiry as are within his reach. To the inquiry, then, what varieties should be planted for profitable orchard culture, Mr. Willard can only reply that the Lombard, Reine Claude, Quackenbush, Bradshaw, Purple Egg, Gueli, German Prune, French Damson, Peter's Yellow Gage and Copper have proved among the best for his soil and market, while of the newer sorts Stanton is one of much promise.

Against the curculio the jarring process has proved satisfactory. If spraying with the arsenites is tried care should be taken to use a solution as weak as possible, because the foliage of the plum is easily injured. The green aphids is often more destructive than the curculio even, sometimes defoliating entire orchards. Professor Cook feels certain, however, that the kerosene emulsion dashed forcibly upon the tree by a pump through one of the new spraying nozzles will overcome this pest. The orchard should be carefully inspected as often as twice a year for the black knot, and on its first appearance the limb should be cut off far below the diseased point. Good culture and an enriched soil will prove helpful against leaf blight. The plum is perishable, so that careful preparation for market is essential, and when the fruit is to be sold from retail stands it should be picked with stems adhering, russets are the oranges proper that have become partly covered with a rusty color. It is supposed by some that the rust is caused by an insect which punctures the skin of the fruit while it is yet small. The rust is believed by many to improve the fruit, as none of the sweet juices can evaporate through the rusty part. Various preparations have been used to prevent the rust, it is believed with some degree of success, for Russets are scarce this year and are at a slight premium.

Reine Claude, Washington, Bradshaw, Peter's Yellow Gage and Stanton. The productive life of a plum tree averages from fifteen to eighteen years, but the Lombard, under proper cultivation, might last twenty-five years.

Pear Trees in Grass.

Irving D. Cook, of Genesee County, N. Y., an extensive and intelligent orchardist, writes to the New York Tribune stating, in corroboration of what we have published in former years, that the largest, most perfect and attractive pears in that locality were grown on trees in soil which had received thorough cultivation yearly since they were planted; while trees in grass bore fruit of inferior quality. A large orchard in that neighborhood had borne heavy crops of fine pears without cultivation, but it had been heavily mulched annually with straw and coarse manure. Another orchard of 1,500 trees had been manured regularly every year, and remained healthy, disproving a common opinion that the blight was produced by manure. Mr. Cook may possibly find when the next blight epidemic passes through the country, that his cultivated pear trees suffer more severely from the disease than trees standing in grass; but the fine crops of excellent fruit which grow on his trees during the many intervening years of freedom from the disease will unquestionably more than pay for any loss to the trees when the malady occurs.—Country Gentleman.

The exports of apples from all American ports, as reported by A. C. Lombard's Sons, for the season have been 1,090,577 barrels, including 319,085 barrels from Boston, 361,234 barrels from New York, 291,692 barrels from Montreal, 61,311 barrels from Portland, and 57,305 barrels from Halifax. For the same time last year the total exports were 493,943 barrels, including 117,147 barrels from Boston, 229,923 barrels from New York, 93,134 barrels from Montreal, 30,006 barrels from Portland, 23,096 barrels from Halifax and 10,484 barrels from Annapolis.

Horticultural Items.

CERTAIN sorts of seeds are very hard to buy of uniform excellence. Such are cabbage, cauliflower, Brussels sprouts, onion seed, and some kinds of flower seeds.

In 1872, California produced 6,000 boxes of raisins; in 1888, the production was \$63,000. Dealers are going to introduce home name, "California Layers" instead of "London Layers," and use the American eagle as an emblem instead of the Spanish crown.

A MICHIGAN man who has two hundred hickory nut trees and about three hundred walnut and butternut trees, says that his income from them, year by year, is larger than that of any farmer cultivating three hundred acres of land. He sells his crop on the trees for cash in hand, and the only expense out is for taxes.

SPRINKLING of the past and present features of the market for fruit, eastern horticulturists tell how they used to sell pears, for \$6 and \$12 per bushel for finest early sorts, but now, before their pear trees are fairly in blossom the market is full of California pears and when the home fruit is ripe, there is no demand for it.

SOME of the most successful market gardeners near Boston have from thirty thousand to fifty thousand dollars invested in their business. In teams, tools, glass, watering apparatus, &c. Good locations are scarce, and command high prices, but money is made by the gardeners, who are intelligent, well read and well informed men.

OWING to the immense crop of onions raised at Canastota, N. Y., last season, many bushels were left upon the fields, and are rotting on the ground. Of those placed in the crib, nearly a quarter were rot at the time, and the changeable weather caused them to sweat, sprout, freeze and thaw, and as a result a large proportion of the crop was ruined.

J. A. HALE, of South Glastonbury, Conn., a well known grower of small fruits, says our runs are one of the most profitable of small fruits. From 1,500 to 2,000 quarts can be raised on an acre and a field can be kept fruiting an indefinite number of years. The only insect enemy of particular danger is the currant worm, easily kept in check by the use of heliothere.

Those fruit-growers who have firm faith in the efficacy of whitewashing the trunks of fruit trees to discourage insects and remove the growth of lichens, etc., are advised that the wash will be equally beneficial if diluted until it will hardly white the bark. And the trees will not lock so ghastly after its application, either. When the wash is thick it forms a scaly crust more apt to do harm than good.

THERE are three different kinds of oranges in Florida, and these are again subdivided into various qualities: The Florida oranges proper, the Mandarin and the Tangerines. Russets are the oranges proper that have become partly covered with a rusty color. It is supposed by some that the rust is caused by an insect which punctures the skin of the fruit while it is yet small. The rust is believed by many to improve the fruit, as none of the sweet juices can evaporate through the rusty part. Various preparations have been used to prevent the rust, it is believed with some degree of success, for Russets are scarce this year and are at a slight premium.

Apianian.

HOW I BECAME A BEEKEEPER.

Dear readers of the FARMER, the Editor has suggested that I write a series of articles for the novice in bee culture or those about to engage in the health and life-giving pursuit of beekeeping.

The question is often asked me by those looking over the reality of the above picture, "How came you to engage in beekeeping?" I anticipate the question will be asked many times during the season by the readers of the FARMER, so will answer it now. First, I think I was born a beekeeper; as long ago as I can remember, and before I ever knew of such a thing as a movable frame hive, or that there was science in beekeeping, nothing pleased me more than to sit by an old box hive or log gum and watch "the tireless little workers" and hear their merry hum. I cannot remember that I was ever afraid of them. Then I had bumble bees in boxes, and at last succeeded in finding a bee-tree. Finally, about 11 or 12 years ago, my wife having many times heard me express my desire for a swarm of bees, bought and made me a present of the first swarm. Well, I was not satisfied with one, so I bought another of the same party (which was all he had), and we commenced beekeeping together. I say we, for my wife's interest has always been equal to mine. It is very gratifying to feel that were I taken away and she had no other means of support, she is capable of conducting the apian, as it now, of 125 colonies, and receive from them an income that would place her beyond being dependent on any one. Yes, eight years before the above picture was taken the yard contained two shabby old hives. From them we have grown to what you see (dimly, however), and for the past five years they have given us an income of not less than \$500.

And now, friends, what I shall try to do in these articles will be to give such information that those of you who feel a natural inclination, and a willingness to work for it, can "go and do likewise." I shall commence my next article with a chapter on hive making, and from then until the opening of spring, I shall recommend just such a course as I should take were I going to commence next spring with nothing but the bare ground to begin on. I shall plan work for you from now until the opening of spring, and I give you fair warning, if you don't like work don't join the army of beekeepers that now numbers over three hundred thousand in the United States and Canada.

Before I close I want to invite any of you to write me upon any question you may desire. You shall all have an answer by enclosing a two cent stamp, and that answer shall be according to the best of my judgment. There is much more I should like to say now, but the cut at the head of the page takes much space, and I have promised to be brief. Hoping we may all be mutually benefited by my efforts through the FARMER, I am truly yours,

FREMONT. GEO. E. HILTON.

WHAT IS SCROFULA

It is that impurity in the blood, which, accumulating in the glands of the neck, produces unsightly lumps or swellings; which causes painful running sores on the arms, legs, or feet; which develops ulcers in the eyes, ears, or nose, often causing blindness or deafness; which is the origin of pimples, cancerous growths, or the many other manifestations usually ascribed to "humors;" which, fastening upon the lungs, causes consumption and death. Being the most ancient, it is the most general of all diseases or affections, for very few persons are entirely free from it.

How CAN CURED

By taking Hood's Sarsaparilla, which, by the remarkable cures it has accomplished, often when other medicines have failed, has proven itself to be a potent and peculiar medicine for this disease. Some of these cures are really wonderful. If you suffer from scrofula, be sure to try Hood's Sarsaparilla.

"My daughter Mary was afflicted with scrofula sore neck from the time she was 25 months old till she became six years of age. Lumps formed in her neck, and one of them after growing to the size of a pigeon's egg, became a running sore for over three years. We gave her Hood's Sarsaparilla, when the lump and all indications of scrofula entirely disappeared, and now she seems to be a healthy child." J. S. GARRIE, Naughton, N. J.

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DETROIT MICH

Poetry

THE DISAPPOINTED.

There are songs enough for the hero
Who dwells on the height of fame;
I sing for the disappointed—
For those who missed their aim.

I sing with a tearful cadence
For one who stands in the dark,
And knows that his last best arrow
Has bounded back from the mark.

I sing for the breathless runner,
The eager, anxious soul,
Who falls with his strength exhausted,
Almost in sight of the goal.

For the hearts that break in silence
With a sorrow all too known,
For those who need companions,
Yet wait their way alone.

There are songs enough for the lovers
Who share love's tender pain;
I sing for the one whose passion
Is given all in vain.

For those whose spirit comrades
Have missed them on the way,
I sing with a heart overflowing
This minor strain to-day.

And I know the solar system
Most somewhere keeps its place
A prize for that spent runner
Who barely lost the race.

For the pain would be imperfect
Unless it had some sphere
That paid for the toil and talent
And love that are wasted here.

A ROSE SONG.

Why are the roses white?
Because in their wistful flight
A mother's tear on a petal fell,
Batoning it lay in the fairest dell.

Why are the roses red?
Because one day, 'twas said,
Love, with a dash of his magic brush,
Tinted a maiden's cheeks with blush.

Why are the roses sweet?
Because from the golden street
An angel of light to earth came down,
With dew of heaven on her robe and crown.

Why are the roses sweet?
Because from the golden street
An angel of light to earth came down,
With dew of heaven on her robe and crown.

Where the roses grew in secret retreat,
That made the roses sweet.

G. P. Brown, in New York World.

Miscellaneous.

TEDDY MULLEN'S COUNTRY SEAT.

BY JOHN RUSSELL CORYELL.

There is only one way to explain about Teddy Mullen, and that is by saying there were two of him. That sounds odd, but you see, it is an odd case. To begin with, there was only one of Teddy, and he was as jolly and good-tempered a fellow as ever was. Fright? Why, bless your heart, Teddy just would not do it! Why should he? That was what he wanted to know.

When Teddy's father died, Teddy left school and went into business. He made himself look neat and trim, and went out to sell papers and to black boots on Park Row. That was ambitious of Teddy—to begin at the very top of the profession like that, instead of taking the side streets first; but that was his way. As his mother often said, "Sure, Teddy'll never taste blue milk when there's yellor crame for 'is havin'."

Perhaps you think all Teddy had to do was just to sell his papers or black boots. The first part of the first day he thought so too. Before he returned home that night, however, his eyes were opened. No, that is not the way to express it either; for as a matter of fact, his eyes were closed—closed by the swelling. What I mean to say is, that Teddy had gained some knowledge.

His own explanation of the first day's experience was this: His mother had raised her two hands and wailed, when he entered the room: "Arrah, Teddy, what's happened ye? How kem ye wid the blue eyes?" You see, she was Irish. Teddy was an American and spoke like one, or, at any rate, like a New York American newsboy. "Me eye? Oh, dat ain't nothin'! I got it by a boy. He didn't want me to sell no papers. Says I, 'Why won't I sell no papers?' Wid dat he heuled off an gimme one in de eye. 'Dat's why,' says he. An' dat's de way dey was a-takin' to me all day."

"Faith, Teddy," exclaimed the indignant Mrs. Mullen, putting her arms akimbo, "I'll go wid ye to-morrow, an' ye'll show me the b'y as thruck ye, an' bedad I'll—I'll—I'll have the law of him, so I will."

"Do boy!" cried Teddy, and as much of his eye as could be seen was twinkling with fun. "No boy didn't do it. The hull lot of 'em done it."

Teddy was ten years old then, and, as has been said, he had never fought; but he did not know how. Two weeks after that Teddy looked as if he had been through the siege of Paris, and he knew how to fight. He says he learned all the boys on Park Row could teach him, for they did nothing but give him lessons during the whole of the two weeks. Thereafter there was not a newsboy in the big city of New York who could wear his hat further back on his head or say more impudent things to car conductors than he. And for jumping on or off street cars, or shouting unintelligible extras, he was acknowledged to be without an equal.

In plain language, then, when Teddy was on Park Row he looked and acted the little ruffian to such perfection that no one would ever have suspected that he could be the same Teddy whom little Mary Ann so eagerly listened for every weary night.

The Mullens lived in two rooms and a closet, "up three pair of stairs, back," in an old-fashioned, slanting-roofed, dormer-windowed house. Mary Ann, who lay abed all the time, on account of her back, had a small room lighted by one of the dormer windows. And there she lay under the slanting roof, unable to catch even a glimpse of the sky because of the high houses opposite. Her little world was made up of the same sounds and the same smells and the same sights day after day, from one

end of the year to the other. There was Mrs. Mullen's rub, rub, rub on the scrubbing board, there was the smell of the warm soapuds, and there were either the dirty brick houses or the endless line of drying clothes.

Was it any wonder, then, that little Mary Ann waited eagerly for the long day to end, and listened expectantly through the dusk for Teddy's whistle? Teddy never forgot to whistle the moment he entered the house, for he knew that sweet music the shrill noise was to the little listener upstairs.

Sunday was the great day, though. Teddy staid at home then, and told Mary Ann everything she wanted to know; and that was a great deal, I can assure you. But it was hard to puzzle Teddy. Such an imagination as he had! What he did not know, for if she found him out by the twinkle of his eye—and she was quick, let me tell you—it only made a great laugh. For all could enjoy a laugh, could that old-fashioned little sufferer, and nothing delighted Teddy more than to give her a chance.

But what Mary Ann most liked to talk about was the fresh air and the country. It was little enough she knew of either; but she had been once to Central Park, and had seen the sheep on the green grass; and ever since that time she had always tried to recall the beautiful picture whenever she was most weary. Teddy knew all about this, and when the first days of spring came round he watched the snow melt off the grass in the City Hall Park as eagerly as if he was expecting to find a pot of gold there. He wanted to tell Mary Ann as soon as he could that the grass was growing, and he was always afraid lest she should ask him before he could say yes. And she was as afraid to ask as he was to have her ask; but one year, when the season had been very backward, she could not be patient enough. It was almost the first bright Sunday that spring.

"Teddy," said she, watching him from under her eyelids; "I wonder could I have the windy open a bit? It looks kind o' soft like outside to-day."

"Why, maybe you could," answered Teddy, so quietly you would never have known he had been dying to have her ask that very thing if you had not looked into that merry eye of his. He put up the window a few inches, and sat down again and let Mary Ann look wistfully at him without twitching a muscle of his face.

"It seems mild enough," ventured Mary Ann. "So it does," said Teddy, as if it had not occurred to him before. Then he went to the window, opened it a little more, and put his head out as if to try the air. Before he took his head in he winked at the teenaged house opposite. When he sat down he was a picture of unconscious indifference. "Yes, it is mild enough," he said.

"The snow will be melting fast if this weather keeps on," suggested Mary Ann. "It ought to," assented he.

"Do you think, now, Teddy," she faltered, though she tried to seem careless—"is it likely—"

"Oh! I say, Mary Ann," interrupted Teddy, as if he was anxious to cut off the question, "did I tell you I went out to my country-seat yesterday?"

"Your country-seat?" repeated Mary Ann, trying to hide her disappointment in a show of interest, for she saw that Teddy had intentionally stopped her question about the grass.

"Certainly, me country-seat. Didn't you know I had one? Oh, there, now, maybe I didn't tell you about it! Well, it's just elegant! There's the house as natural as if it grew there, an' the pond wid the goldfishes in it, an' trees covered wid green leaves." Mary Ann's heart gave a jump at the thought of green leaves. Teddy was watching her out of the corner of his eye.

"An' the little sheep so playful," he went on. Mary Ann began to suspect something, and a funny little smile quivered on her lips. "An' the grass so green," shouted Teddy, snatching something from his pocket, and presenting it to his sister with a flourish.

"Grass! real grass!" shrieked Mary Ann, in an ecstasy of delight, her frail little body trembling, and her hands shaking so that she could not take the precious green stuff. "Oh, you dear old Teddy! You old tease!" she sobbed. "Teddy dear," she exclaimed, after she had hugged and kissed the poor little tuft of grass to her heart's content, "you won't let it die, will you? Can't you get some dirt in one of those cracked cups and put the dear grass in it? The cups are here. I can't let it die now, Teddy. Dear old Teddy, to think of it! It's the first grass I've seen for five years, an' I tell it, Teddy?" And, as Teddy declared, Mary Ann cried out of one eye and laughed out of the other.

Of course Teddy ran—sledd, I mean—down stairs, and brought back a cupful of earth. Great was the care and anxiety with which the tuft of grass was planted, watered, and put out in the sunshine.

"That's your country-seat," laughed Teddy, "barrin' the sheep an' the trees an' the house an' the pond an' the fishes."

"So it is," said Mary Ann, clapping her hands joyously. "And when you bring it in to show it to me—I can see it once a day, can't I?—we'll put me going into the country. Ah, Teddy, let me see it for a minute again, won't you?"

Mary Ann's extravagant joy over the tuft of grass set Teddy to thinking. His one great wish was that his little sister might rise up from her bed and be his active little playmate once more, though he had about given up hope of it. The doctor had said once that if she would only try every day to walk a little she might eventually become almost well again. They had coaxed her then to get up and walk with their aid to the window. She had looked out on the lines of drying clothes, had gazed up at the dingy tenement houses opposite, and then her lip quivered, and she said, piteously, "Please, I want to go back."

They took her back to her bed, and she had not left it again. Mary Ann's heart was in the green fields among the sheep, and the outlook from her window only made her more sick. But now, at last, Teddy had a plan by which he hoped to entice her from her bed. The morning after he had given her the tuft of grass he sat on his blacking box in the City Hall Park, and checked off on his fingers:

any old piece of wood, twenty-five cents will be enough for the—Um, yes, that'll do. I'll have it ready for her birthday. Maybe she'll get up then."

What was he thinking of? Whatever it was, he kept Mary Ann in profound ignorance of it, though from that time until her birthday on the 1st of June he talked mysteriously of his country seat, describing it with such distracting details about green fields and sheep and lakes and goldfishes that Mary Ann was nearly beside herself with curiosity.

The sly ways she tried to surmise Teddy's secret were a cause of much merriment to him and jolly Mrs. Mullen, who endorsed every claim her son made to the possession of a landed estate—"wid a house—faith, ye might call it a mansion, darlin'—an' the lake an' the fishes. Sure ye might catch 'em in yer hand, they are that gentle. Eh, Teddy?"

"You're right, you can," Teddy would respond, and then they both would laugh, as if at some rare joke.

Mary Ann pretended to be very indignant at not being let into the secret, but in good truth she was in a state of high delight all the time, for she did dearly love a mystery. And, moreover, she knew she was to be enlightened on her birthday, for they told her so.

"You shall see me country seat on your birthday," Teddy would declare.

"But how can I see it when I can't walk?"

Whereupon Teddy would wink at his mother, and she would try to wink at him, but as she had not acquired that accomplishment, she would only make a hideous grimace, and Mary Ann would laugh gleefully.

There was great excitement in the Mullen family on the first day of June. Mary Ann's eyes were shining, her tongue was dying, and her fingers were hugging each other. Teddy's looks and actions betokened little short of insanity. And Mrs. Mullen, after a terrible effort to eat her breakfast in calmness, gave it up, and declared that Mary Ann must see the country seat at once; to which nobody made the slightest objection.

"Now, Mary Ann," said Teddy, "shut your eyes tight, and don't look so much as a wink till I tell you."

Mary Ann shut her eyes with a snap, and then what a commotion took place! Such a shuffling of feet! Such suppressed exclamations of "Take care!" "Mind the hole in the carpet!" "Sure if there was a mortgage on it, it couldn't be heavier!"

"Open your eyes, Mary Ann!"

!!!!!!

You should have been there. For unless you have a wonderful imagination you can have no idea how Mary Ann looked, or what she said, or how she said it, when her eyes opened and gazed upon Teddy's country-seat. It was not large—about the size of a starch box, I should say—but it was complete.

There was green grass with sheep on it—no alive, it is true, but "moulted lofe-like." There was a lake with real fish swimming in it and a boat floating on its surface. There were walks laid out, and there was a tiny house. And there were violets too, and all around the estate grew hanging masses of Wandering Jew, Oh, it was a beautiful country-seat, I can tell you!

Mary Ann laughed and Mary Ann cried and Mary Ann talked. And when she had well fastened her eyes on the pretty sight, the country-seat was put outside of the window in the sun. And what a task it was to get it there! You may be sure Teddy made the most of the trouble too, for he wanted a good excuse for making Mary Ann get up to look at it.

How tenderly he coaxed her to try to get up! She was too tired then, she said, but maybe she would later. She realized more then than she ever had before how much Teddy wanted her to be up, and when he had gone she had a long talk with her mother about it. But it did not seem to have much result, for when Teddy tried to induce her to make the effort the next morning, she could not be brought to attempt it.

And so the summer went by, Mary Ann refusing to make the effort so persistently that at last poor Teddy gave up hope, and settled down to the old way again. It was some comfort to him, however, to see Mary Ann look better, and pretty soon he almost forgot his disappointment in a mystery which she and Mrs. Mullen were preparing for his birthday.

"Maybe I'll show you my country-seat," said Mary Ann, who did her best to pay Teddy back for his mystery.

Teddy's birthday came late in November, and by agreement he was to come home that day to a noon dinner. He might as well have staid home all day for all the work he did, but Mary Ann and Mrs. Mullen had particularly forbidden him to enter the house before 12 o'clock.

He was not late, you may be sure, for he was overflowing with curiosity. His mother was just dishing some carrots. He hastily kissed her, and then darted into Mary Ann's room. There was a wild cry of terror.

"Mother! Mary Ann! Where is she?" Teddy's white face showed in the doorway. "Where should I be but here?" demanded Mrs. Mullen's voice.

Her voice—yes; but could that be Mary Ann—her own true self—that little girl standing by the table with a dish of potatoes in her hand, trying to look as if she had never been in bed, except at night, during her whole life?

Catarrh Cured.

A clergyman after years of suffering from that loathsome disease Catarrh, and vainly trying every known remedy, at last found a recipe which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self-addressed stamped envelope to Prof. J. A. Lawrence, 83 Warren St., New York City, will receive the recipe free of charge.

The Earth Seen from the Moon.

La Science Illustrate says that as seen from the moon, which gravitates around us at the mean distance of 240,000 miles, the earth appears four times greater in diameter and thirteen times wider in surface, and consequently, more luminous than our satellite in depths of celestial space, she soars with majesty, and shows phases analogous to those exhibited in the moon, but in inverse order. When the sun covers with his rays the terrestrial hemisphere that faces the moon, the latter is new, and the full earth is shining in the sky; while at the moment of the full moon it is the non-illuminated half of our globe that is turned toward this neighboring world; the earth is then new. To the first lunar quarter corresponds the last terrestrial quarter, and to the first quarter of the earth, the last quarter of the moon. The lunar day, the period during which our satellite successively presents every portion of her surface to the solar rays, and consequently makes one revolution upon her axis, equals twenty-nine days, twelve hours and forty-one minutes. During this first quarter at sunset and its last at sunrise. So the "earth-light" contributes much more to the illumination of the lunar nights than the moonlight does to the illuminating of our nights, and the sciences have truly more reason for believing that the earth exists for the sole purpose of dissipating the darkness of their nights than we have for considering the moon as created to be the torch of terrestrial nights. Our planet is afterward visible, amid the stars, and despite the sun's presence, under the form of a large crescent, which gradually diminishes in width until it entirely disappears at the moment of the new earth. The daily rotation of the earth upon its axis forms a very attractive spectacle. Varied spots mark our continents and seas, over which move vast bands of clouds. Two white caps cover the poles. The oceans have a bluish green color darker than the land. The contour of the disk, more luminous than the inner part, is slightly reddish under the influence of atmospheric refraction. Europe and Africa, Asia and the Indian sea, the Pacific, the two Americas, and the Atlantic define in turn every twenty-four hours. The earth thus forms a marvelous celestial clock that may be consulted by but a glance at the heavens, and to which the succession of the terrestrial phases adds another base for the measurement of time. In the course of the long lunar night of 354 hours, which forms half of the diurnal period and succeeds daylight, the earth soars majestically in the heavens, undergarms her phases from the first to the last quarter, and at midnight shines with an intense light fourteen times stronger than that of the full moon. With so strong a light do we illuminate that part of our satellite which is dark at this epoch that it becomes visible from here, owing to the reflection of the terrestrial rays from its surface.

This is a Parable.

She was all his fancy painted her and a good deal more. She was lovelier and more divine than any of the other daughters of men, looked for where you would from Maine to California. He set her on a pedestal as a goddess, and he worshipped her as if she had been the thing he fancied. Madly in love, he could neither eat nor drink, nor yet sleep, for the ardor of his longing to make her his and his only. The engagement was more agony than bliss to him, because it was not marriage, and the marriage was like a mirage which never seemed to come nearer—so slowly did time limp on his way and so lengthy were the intervals even when shortening.

At last the glorious morning broke, and the two lovers were man and wife. For a time, here again the sweet illusion lasted, and the world was seen through a silver veil; but not for long. Beauty does not include reasonableness—youth is not necessarily good temper—to be loved is not the same as to be wise. So young Edwin found before the orange blossoms in Angelina's bonnet had time to fade. He had married a lovely face, a graceful figure, an empty head and a soul reduced to its elements, and small at that. Of principle, so that the right thing should be done even at the cost of personal inconvenience—of domestic qualities such as make happy home, a respectable condition and a prosperous marriage—Angelina had not the veriest shadow. She was thriftless, idle, unthinking, graceless. The servants kept the house and she did not even keep the books. Edwin's salary was of the most rigid character and the most restricted dimensions; but she let the meal run out of the sack and the ale out of the barrel and did not attempt to stop the waste. She was always beautiful and always daintily attired. In bed half the day, she was the most exquisite production of art and nature for the other half.

But her loveliness at last became a drag in the domestic market, which Edwin would willingly have bartered for a humpback and a liney woolsey gown, added to the working qualities of a good housekeeper, who kept the expenses within his income and made the home both honorable and home-like. With debt, equal, extravagance and disorder the degradation was as certain as that a throne will fall when the lion-legs are rotten. He had been cursed with his wish and the blight was severe. Angelina's views grew daily worse, and his temper flared and shrunk. At last the inevitable catastrophe came to pass and bankruptcy followed by separation landed him into desolation and the useless regrets of repentance. He is now a poorer man, a sadder and no doubt so far a wiser, to-day, than he was on that bridal morn of May when he married his adored and thought he had forced the gates of Paradise once and forever, and had built him for life an enduring tabernacle among its flowers and flowering bushes. He has learned by terrible experience that a man does not always know what is best for him, and that even the sickness of love had sometimes better endure unhealed than be cured for time and eternity by the caustic of matrimony.

The way to make money is to save it. Hood's Sarsaparilla is the most economical medicine to buy, as it is the only medicine of which can truly be said, "100 doses one dollar." Do not take any other preparation if you have decided to buy Hood's Sarsaparilla.

German Hatred of the Jews.

The Berlin correspondent of the Tribune says that there is at the German capital a Jewish banker who is the founder of a Jewish bank that may rival that of Rothschild. His name is Bleichroder. He has had many bitter disappointments in every way but in business, and the correspondent says: "With wealth came social ambition, and with social ambition a campaign of defeat. It is difficult for Americans to realize the barriers in the way of the Hebrew in Germany. The anti-Semitic sentiment is widespread and violent. The aristocratic classes are thoroughly in sympathy with the movements of Court Chaplain Stocker and the drawing-rooms of the nobility, filled with 'Judenhetzer' and closed to the Jewish Croesus. They are debarred from all society other than their own; they are excluded from certain offices in the judicial career and are rejected as candidates for the army, and the noblemen of Germany are in their power, and the moneybags and Bleichroder's strength in this way is enormous. Half of the cavaliers in this city are in his debt. Even Emperor William I. owed him money, and was greatly indebted to him for assistance during the Franco-Prussian war, for which he raised him to the nobility." The banker's daughter was sent into society under the chap-ronage of a lady of the old nobility, and by favor of the late emperor she was invited to a court ball; but not a nobleman present asked her to dance, and not a lady glanced at her. She did not care to attend another court ball. The banker's son could not get a place in the regular army, but the father's influence secured him a position in a regiment of the reserves; and the result was only insult and humiliation. The correspondent says: "Upon one occasion, while attending the manoeuvres with his corps, the commander had the bugle blown to assemble his aids. Bleichroder naturally came up with the rest, but the commander turned to him with the words: 'Sir, I wish it distinctly understood that when I call the officers, you are not included in the number.' Bleichroder's title was as good as theirs. The old banker once thought it incumbent upon himself to invite the officers of his son's regiment to dinner. The invitation was at first refused, but the emperor, hearing about it, ordered its acceptance. Accordingly, at the appointed time, the corps attended in a body. Herr von Bleichroder was called to the door. 'At the command of his majesty, William, Emperor of Germany, sir, we appear here for dinner,' said the spokesman. Silence reigned throughout the meal, after which the insolent fellows left the house without waiting for the benediction of their host." The young man finally left the army, as a fellow officer slapped his face for impatient words about the emperor. He is now to take charge of his father's establishment in Germany. The old man, though growing blind, retains all his mental power, and it is said, is still frequently consulted by Bismarck on the financial policy of the nation.

The Inaugural Ball.

The Philadelphia Times develops a couple of columns to the account of various balls and receptions on the inauguration of a new president. Here is what the Times says of Mr. Madison at his inaugural ball, and of the two during the presidency of Grant:

The inauguration ball is a national institution. Of that there can be no doubt. Following the example set by Washington, lights have twinkled their brightest, music has sounded its sweetest and beautiful women have looked their loveliest to celebrate the incoming of president after president. Some of the earlier executives gave receptions instead of having balls given them. Jefferson, of course, gave nothing, and against Republican simplicity by calling on him in a body and sending word that they awaited him in the levee room, he did not stop to draw off his muddy boots before stepping in to greet them, cordial but incorrigible.

Replenished Dolly Madison! Thy regime made full amends for the lack of fetes in the years that she gone before.

And yet she did not dance. When the manager of the inauguration ball brought her the first number of the programme, she smiled, but answered quietly: "I never dance, what shall I do with this?"

"Present it to the lady next you."

"But I'm afraid it will look like partiality."

"Then let me give it to you," and he gave it to Mrs. Madison's sister.

Pretty Mrs. Madison, who painted and powdered and patched and wore shockingly low gowns, whose waists ended under the bosom—just such gowns as they are tempting us to wear now—and who was so sunny and so kindly that they said of her she only dressed to please other people by giving them her charming self on which to gaze.

She loved warm colors, and there are full descriptions of the gorgeous robes of buff velvet which she wore to the inauguration ball, and in which she "looked and moved like a queen." She wore full strings of pearls upon her neck and her arms, and on her head was a Paris turban set with bird of paradise plumes. She would be a strange figure now, the magnificent dame who yet had a pocket for a bandana, which she stole Henry Clay, as she wiped away the snuff, was "for rough work," while the lace handkerchief which she fluttered a moment later was her "polisher."

The ball at Grant's first inauguration was a nightmare. People who were there think of it with a shudder, and awake from dreams of it in a cold sweat. It was held in the Treasury building, and the air, as Mary O'Connor wrote of it, was penetrated with fine dust ground till there was nothing to breathe but desiccated griststone. There were mortals who were tucked away in their graves because of it. There were diamonds, pearls and precious garments, which were ravished from their fond possessors forever before the festivities closed. An army of colored messenger boys manned the cloak room. Not half of them could read numbers, and when the gala night was over and hats and wraps were demanded there was no telling which was whose. Six thousand tired people protested. The worried boys temporized. Six thousand impatient peo-

ple clamored. The frightened boys tipped six thousand cloaks in a promiscuous heap on the floor. Then came the fight for something, anything to protect one from the pitiless air outside. There was snatching and pulling. Women who could not or would not scramble shivered in corners and wept on window ledges, where morning found them exhausted. Greedy went to his hotel bareheaded. Another man walked two miles in dancing pumps and without his hat. It was five years before letters of inquiry stopped coming asking for articles lost at that awful ball.

The ball which inaugurated Grant's second term cost \$60,000. An immense building was put up for the occasion, with a great dais big enough of itself for a hall, an eagle spread his wings overhead and in his talons he clutched streamers one hundred feet long. Thousands of canaries were hung in cages in the folds of the banners. Mrs. Grant was gorgeous in white silk and black lace. Mrs. Fish, stately and serene, sat beside her on the platform. Nellie Grant stood by her father, holding fast to his hand. Tall Lady Thornton, Mrs. Creswell, Mrs. Boutwell, Miss Flores, from Ecuador, were only a few of the brilliant figures in the assemblage. The cloak room was everything that heart could wish, but everybody froze; it was in the depth of a blizzard. West Point cadets had dropped in the ranks chilled to the marrow in the street parade that day. And the ball room was not warmed. Shawls and cloaks were thrown over bare shoulders and jewels were hidden in hoods. Teeth chattered, skins turned blue. Never was such a demand for hot coffee; never was such vigorous dancing. The canaries never piped a note. They were paralyzed with cold. The distinguished guests who sat on the dais felt themselves momentarily congeal. Before 12 o'clock everybody went home. Grant, with all his simplicity, had an honest love for display, but he had had luck at both his inauguration balls.

Copied from Nature.

Most of the skillful devices invented by men for doing fine work rapidly can be traced to nature, where for countless centuries they have been operating. The discoverer of each new appliance of mechanism might be shown that his idea was as old as the hills. It is claimed that the inventors of the future will be those who carefully study the natural world. The bulr stones of the mills are another style of the molar teeth which grind all the grist that feeds men and beasts. The hoofs of horses are made of parallel plates like carriage springs. The finest file of human manufacture is a rough affair compared with the Dutch rush used by cabinet-makers. The jaws of the turtle and tortoise are natural scissors. The squirrel carries chisels in his mouth, and the hippopotamus is provided with adzes, which are constantly sharpened as they are worn. The carpenter's plane is found in the jaws of the bee. The woodpecker has a powerful little trip-hammer. The diving bell imitates the work of the water-spider, which constructs a small cell under the water, clasps a bubble of air between its hind legs, and dives down to its submarine chamber with the bubble, displacing the water gradually until its abode with fishes contains a large airy room surrounded by water. In laying its eggs on the water the boat fastens them into the shape of a life-buoy, which it is impossible to sink without tearing it to pieces.

The iron mast of a modern ship is strengthened by deep ribs running along its interior. A porcupine quill is strengthened by similar ribs. When engineers found that hollow beams were stronger than solid ones, they only discovered a principle that is very commonly seen in nature. A wheat straw, if solid, could not support its head of grain. The bones of the higher animals are porous, and those of birds, where lightness and strength are most beautifully combined, are hollow. The framework of a ship resembles a skeleton of a herring. Aeronauts try to copy the structure and movements of birds. Pailley, the French potter, studied seashell shells to learn the best method of fortifying a town. The shipworm is an admirable tunneler, boring his way through any submerged timber and lining the round passage with a hard casing. The engineer Brunel took a hint from this animal, and was the first to succeed in tunneling under water.

Corn Bread for Europe.

Corn is one of the most important articles of our export trade. In 1887 we sent out 40,000,000 bushels, the total value of which was \$19,374,361. In other years we have nearly doubled this amount. It would surprise one unfamiliar with the facts to know that practically all of this export is sent abroad to feed cattle. Of the use of corn in the preparation of table food the foreigner knows nothing. At the present moment the German peasant is paying nearly double the price for wheat loaves, or else starving himself on a diet of coarse rye bread. Within his reach is this cheap food, one of the most delicate and nourishing known to the American epicure. He does not use it because he has never been taught to do so. No doubt the obstinate dislike to accepting new ideas, so strange to an American but familiar to every observer of European habits, is largely responsible for this curious fact.—New York Commercial Advertiser.

Conscience and Kreutzers.

Maria Theresa, of Austria, was greatly addicted to gambling, and played for exceedingly high stakes. The court functionaries did all in their power to overcome this passion, but to no purpose. They finally appealed to the Empress's confessor, who induced the imperial gamster not to give up cards, but to play for only a copper kreutzer a point. The cunning Empress, however, ordered her jeweler to make her 100 kreutzers in a peculiar manner so that each one could be opened in the middle and a diamond inserted. The two pieces were put together so that only the initiated knew that they were not what they seemed. Thus the Empress kept the letter of the confessor's demand and at the same time carried on his brave recreance was a Jew. The jerking at once ceased and the crowd slunk away.

Her Timbrel Tones.

"Dear me," ejaculated Mrs. Tonbunter, after hearing her daughter execute a brilliant aria several sizes too big for her, "hasn't Almira got a magnificent timbre for her tone?" "Timber!" snarled the crusty old uncle who had always desired his niece to learn cooking. "Timber! lots of it! Why, it's the most woody voice I have ever heard."

The Wrong Proposition.

"Well, my boy," he asked, cheerfully, at the breakfast table the morning after Cholly had taken the important leap, "how did things go last evening? Did the smile on your proposal?" "No," said Cholly, faintly pushing away a breakfast roll. "She smiled at it."

A Russian Jew's Heroism.

"Let him sink," he is only a Jew," was the exclamation of a crowd of people in a Russian town recently, as they beheld the struggles of a poor wretch in the river. Just then a young man broke through the crowd, and, with a bold leap, he plunged into the river, brought the drowning man to the shore. As the crowd began to jeer at him for saving the life of a mere Jew, it was discovered that the man whose life was saved was a Gentile, and that his brave rescuer was a Jew. The jeering at once ceased and the crowd slunk away.

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(Continued from First Page.)

R. M. Huxhitt, Chicago, Pres. Chicago & Northwestern R. R.; R. H. Cable, Chicago, Pres. Rock Island R. R.; R. H. Stone, Chicago, Gen'l. Supt. C. & N. W. R. R.; C. McMillan & E. F. Jeffrey, both prominent railroad men and connected with the railroad centering at Chicago. The great railroad companies bring live stock from all points of the compass to their stock yards, two-thirds of which the dressed meat is taken upon terms of their own dictation, transfer them to their slaughter-houses adjacent and prepare them for market. They deliver most of the product back to the railroads for transportation to the consumer (where they also fix the price), a portion of which goes back to the very localities from which it came.

Not long since I read an account of the shipment of cattle raised in the State of Colorado, of which Denver is the principal city, to Kansas City, where the cattle are sold, and before hardly cold were in the refrigerator cars speeding their way to Denver to market. The operation of the railroad for the transportation of the cattle to Kansas City and the carcasses back to Colorado, the dressed meat man's profit on buying and killing, and what does the producer get? He gets the value of his cattle at home less the cost of double transportation and the profit made by the dressed meat man. The same thing is a common occurrence all over the west, and to a limited extent here in Michigan.

The farmer of Michigan is just beginning to feel the effect of the concentration of the cattle trade into the hands of the dressed meat men. I say, just beginning to feel the effect, for the full effect will only be felt when they have the cold-storage houses at all the principal cities and villages of the State. To illustrate their power and what may be expected, I cite you to the following taken from the market report of the Chicago Tribune of October 19th, last:

"A man came in from Omaha with a train load of cattle for sale at Jackson, Jan. 3, 1889. Four offered him \$5 per 100 lbs. at that point, but the owner preferred to come to Chicago; but when he got here he found that \$4.00 was all he could get for his cattle. The men were worth considerably more, but it seems they were 'pooled' against, and only one man would look at his cattle. He was a representative that offered \$3 for them in Omaha."

Already the farmer feels its hurtful influence in lower prices and a poor market. Where formerly there was always a home demand for his surplus at remunerative prices, now he must compete with the dressed meat men of the State, New Mexico, Colorado and Montana. He purchases his lands, cultivates and improves them, builds his home, contributes to the building of the school-house and church, pays taxes annually to support the State, the county, the town and if he would not mind his farm deteriorate in value year by year, must grow cattle and sheep to consume his grain and coarse feed grown upon his land, and when they run wild the year round. The rancher pays no taxes or rent, does not have to house and feed them, but the Michigan farmer does, but when he has his cattle at the Chicago market must submit to the price fixed by the "Big Four." No wonder that all over the west there is a protest against the dressed meat monopoly. It is not confined to the producer alone, but the consumer is also on the alert, and while he is anxious to get his meat at a low price as possible he wants to know that, when he has purchased and paid for it, it is suitable for human food. Neither the farmer nor the ranchman are getting good prices; the consumer seems not to be benefited, for the retailers' prices are the same as in the past, so that apparently the only ones reaping any profit from the present depressed state of the cattle market are the dressed beef combine and the retailer.

If there is a remedy, what is it? During the present month have been introduced into the legislatures of the States of Pennsylvania, Ohio, Kansas, Iowa, Missouri and Colorado, designed to secure an inspection alive and on foot within the State of all cattle designed for consumption as human food.

It has been well said that "Whatever concerns the lives, the property, the health, the comfort, the peace and the general welfare of the community within the territorial limits of each State is peculiarly the subject of State legislation and it is upon these subjects there is no limit upon State authority except the restrictions contained in the Federal and State Constitutions." "When we consider the nature of these restrictions it is difficult to conceive how any one acquainted with them, or with the general nature of our politics, system, and for a moment doubt the absolute power of the State legislature to enact such laws as by them may be considered necessary to preserve the health of the community or of its members."

Justice Grier, in the case of Moore vs. Illinois, 11 Howard 13, in discussing the police power of the State, and under it, the power to make municipal regulations for the restraint and punishment of crime, for the preservation of the health and the safety of citizens, has never been surrendered by the States or restrained by the constitution of the United States.

This is known and denominated as the police power of the State, and under it, the right to regulate commerce between the States, the doctrine is well recognized that commerce may be legitimately affected by State laws when they are enacted for the health and safety of the community, and have that as an object.

In the case of Robbins vs. Shelby Taxing District, 129 U. S. Reports, Justice Brady says: "It is also an established principle that the only way in which commerce between the States can be legitimately affected by State laws is when by virtue of the police powers and its jurisdiction over persons and property within its limits, a State provides for the security of the lives, limbs, health and comfort of persons and the protection of property; or when it does those things which may otherwise incidentally affect commerce, such as the passage of inspection laws to secure quality and measure of products and commodities; the passage of laws to restrict or regulate the sale of farm products deemed injurious to the health or morals of the community."

Thus it appears that the States have a right to enact inspection laws, under the general police powers, for the protection of the health and comfort of its people and to secure wholesome food, and that it is no objection to say that it indirectly may affect the commerce between the States.

Does such a condition now exist, as calls for the passage of an inspection law in Michigan? If so, then the present legislature should be called upon to act, for what higher object for legislation can there be than the preservation of the health of the people and the securing to them of wholesome food. That there is prevailing among cattle, and especially among those of the far west, the disease known as "lumpy jaw," is a certain and it is also certain and undisputed that these "lumpy jawed" cattle and their way to the market is a source of danger to the health of the State, even the dressed beef monopolists insist that the inspection there is so thorough that all diseased cattle are killed and sent to the rendering establishments, yet notwithstanding these assertions these "lumpy jawed" cattle passed through their alleged inspection and were received in Detroit Dec. 19th, last.

Health Officer Duffield can be believed. I believe there is an inspection law, and the dressed meat men admit its necessity by insisting that it is rigidly and thoroughly enforced there. If a necessity for Illinois, why not a desirable law for Michigan? Is not the health of the people of Michigan of much importance to us as the health of the people of Illinois is to that State? Ought not our people to be protected from the consumption of poisonous meat from lumpy jawed cattle as well as the people of Illinois? It is a sufficient answer to say that an inspection law in Michigan will deprive the "Big Four" of some of their ill-gotten gains? Under what obligation are the people of Michigan or any other State to the "Big Four" who have built up a monopoly and for years have been growing rich off the farmer and stock-raiser by robbing them? Does not the State have enough cattle to supply its own people with meat and to spare? Is it an objection to the inspection law that it will have a tendency to preserve the Michigan market to the Michigan farmer, and to enable the Michigan butcher to get the benefit of his labor instead of sending it to Chicago to swell the already bloated purse of the Chicago dressed beef octopus?

The time has arrived when it behooves the farmer and stock raiser to awaken to their interests and to demand such legislation as will assure to the health, comfort, safety and general welfare of the people of the State, even though it drives Chicago dressed meat out of the Michigan market and substitutes in its place the wholesome meat from the healthy, home-fed cattle of Michigan.

Mr. Boyden said the paper made clear many things about which farmers were not

well informed, regarding the way this business was conducted.

Mr. Maynard said he had been interested in this question for some time. He regarded it as a very important one to breeders as well as farmers. In the town in which Jackson is located, there was about 600 head of young cattle outside of dairy stock—cattle being fed for market. If the same average it would give 11,400 head. It was not too much to say that these cattle had been depreciated in value \$10 per head by the dressed beef business. This would be a loss of \$114,000 for the farmers of the county. Then for the local markets of the State were being killed out, and soon farmers would have to ship their cattle to Chicago or Buffalo to sell. He thought farmers had not realized how important this question was to them.

President Boyden read a letter from F. A. Baker, of Detroit, who was on the programme for a paper on "The Mission of the Shorthorn Breeder of Michigan," expressing his regret at not being able to be present, owing to business engagements. C. Shurtzoff presented the following resolution, which was adopted:

Resolved, That the Southern Michigan Shorthorn Breeders' Association, having a membership in the counties of Calhoun, Eaton, Ingham, Livingston, Washtenaw, Lenawee, Hillsdale and Jackson, at its annual meeting at Jackson, Jan. 3, 1889, most earnestly advocates the enactment by the Legislature of a law requiring an inspection, alive and on foot, of all cattle designed for consumption as human food, in all the cities and villages of Michigan, and request the members of the Legislature residing in said counties to earnestly advocate the passage of such a law.

Resolved, That the Secretary be instructed to draw up a copy of this resolution to the presiding officers of both branches of the Legislature.

Upon motion it was decided to purchase with the surplus in the treasury certain copies of the American Shorthorn Herd Book, to be kept at some place in the city of Jackson where members of the Association could consult them at pleasure.

Upon motion of A. A. Wood, a committee was appointed to send copies of a petition to the Legislature for the passage of a cattle inspection law to all the breeders in the State, and request to circulate them for signatures in their various localities, and send them to their representatives in the Legislature. Adjourned.

Worsteds.

During the past two years no single fabric has attracted so much attention in the woolen goods trade as worsteds. This was because of the low duty under which woolen importations classified as worsteds were assessed, and because Congress refused to increase the tariff laws to meet the necessities of the woolen manufacturing interest, and to be in keeping with the spirit of the tariff itself. However persistently the manufacturers have pressed their claims for legislation, they have in their defence the single and very important fact that there is no such material nor fabric as "worsted." That term was first employed to describe a yarn made at the village of Worsted, Norfolk, England. The process of making this article was to comb instead of card the long hair from which the yarn was spun. Such is the method of manufacturing worsted, hence the term "worsted" cannot be applied to a fabric made from combed wool. This, too, is the declaration of the latest and highest authority on the subject, it being pointed out that the term "worsted" is very much older than the combing machine by which wool is combed.

Although as early as April 30, 1818, the tariff laws provided for importations of worsted or stuff goods, the so-called worsted coatings of to-day were practically unknown until fifty years later. In the spring of 1869 the writer purchased in Huddersfield, Eng., a new fabric made with a web of worsted yarn. As it was made of a long hair that would not felt easily it could not be dyed, and of this fact the manufacturer at the time was "crooked" very badly, but the novelty of the cloth made it desirable, though it remained in vogue but for one season only. From that time until 1887 nothing new was heard of worsted coatings. Then, however, the Washington Mills, of Lawrence, Mass., produced them in vast quantities. These mills were poorly equipped to manufacture economically, and the Washington Company, Providence, R. I., soon took a leading position in that direction. They were followed by the Riverside Mills, and in due time others also joined the movement. Until a few years ago the fabric, for want of the machinery to treat the raw material, could not be felted, hence it was wily in the handling and more or less porous. Inventive genius saw its opportunity and was not long in providing a method for the combing of the wool, constructed that would comb wool of less than two inches in length, while cards provided that would card wool of six to eight inches in length.

For these reasons the former contention that worsted was made from long wool that was combed, and wools from short wool which was carded, are no longer tenable. The very latest authority on the subject, and a practical optician at that, asserts that the only difference between worsted and woolen depends upon the arrangement of the wool, that in the worsted the fibres so lie that the serrations with which they are covered will point in the same direction, rendering them less suitable for felting than if arranged indiscriminately, as in the case of woolen.

Compared with the so-called worsted coatings of a few years ago, the worsted fabric of the present day represents progress than woolen. This is the result of the felting properties of the fine Merino wools from which our modern worsteds are made. Worsteds, it is seen, are more or less sensitive to the action of a leather. The feel, makes them more solid, and susceptible of a lustrous finish. All these results are obtained through new machinery for combing short and fine Merino wools. For these reasons worsted coatings very properly are such a woolen cloth as any fabric made from the wool of the sheep. Their designation as "worsted" is only to show that the raw material from which they are made has been combed by the process mentioned. The fibre of the wool, if drawn from the wool cloth, is much nearer its original condition than if drawn from the cloth made of carded wool.

As a substitute for faced cloths solid color worsteds in the plainer varieties have been increasing steadily in popular favor. For other than full dress they are worn by all classes. They are more springy and do not wrinkle so much as the cloth made of carded wool. Moreover, they are more serviceable in all respects, and this fact is the most important of all with the majority of consumers. In wavy fancy styles they are more attractive than carded wools, because of the brilliancy of their colors. They are susceptible of higher finish than carded wools, and because of their general adaptation to the wants and tastes of the American people the indications are that the general demand is likely to exhibit a steady increase.

OWSON, August 2, 1888.
R. H. SPARKHILL. In the spring of 1885 we had a yearling filly so lame with a creaked ankle in front that every one said she was no good; the use of one bottle of your Specific made her perfectly sound and so remains to this day.

DEWEY & STEWART.

Veterinary Department.

SALT and ashes mixed in the feed for hogs, it is said by those who ought to know, has a great tendency to ward off diseases.

WE call attention to the advertisement of Dana's Metallic Ear Label. A sample is offered free to each of our subscribers by G. H. Dana, West Lebanon, New Hampshire.

MURTY or otherwise damaged oats, hay or corn, are one of the principal causes of colic and other diseases of the alimentary canal. Four quarts of oats and ten pounds of hay are enough for an ordinary horse, performing ordinary work.

SCURFY HOGS.—Worth trying. It is said by a farmer who has tried the experiment so often as to be sure of his ground, that buttermilk poured over the back of a scurfy pig will entirely and speedily remove the scurf. Will some of our subscribers try it and report the result for the benefit of others?

A MR. WHITE, a well known breeder of sheep in Lawrence Co., Pa., gives the following as a specific in foot rot: Take carbolic acid and pour it upon a piece of copper, let it stand until the acid ceases to act on it. Clean the hoofs, trim off the ragged edges, and apply with a swab. One or two applications are sufficient. Our own remedy is: Take equal parts of powdered sulphate of copper and alum, well mixed, dissolve one ounce in a quart of hot water. Clean the foot well and set it in the solution for several minutes. One application usually cures a severe case, when properly managed.

Commercial.

DETROIT WHOLESALE MARKET.
DETROIT, Feb. 9, 1889.

FLOUR.—Quiet and unchanged, except on lower grades which have declined. Car-load quotations are as follows:

Michigan roller process..... 4 35 @ 45
Minnesota, best..... 4 30 @ 40
Minnesota, medium..... 4 25 @ 35
Rye..... 3 30 @ 40
Low grade..... 2 75 @ 30

WHEAT.—The week ends with wheat slightly higher than at the opening, and a firmer feeling apparent in all domestic markets. Liverpool also reported a stronger market yesterday. Closing prices yesterday were as follows: No. 1 white, 1 00 1/2; No. 2 red, 98 1/2; No. 3 red, 97 1/2; rejected red, 74 1/2; No. 1 red, 97 1/2; No. 2 red for May delivery closed at \$1.02, and July at 90 1/2 per bushel.

CORN.—A shade lower than a week ago, but market quite active. No. 2 quoted at 34c; No. 3 at 33c; No. 2 yellow at 34 1/2c; No. 3 yellow at 34c per bu. In futures No. 2 for March sold at 34 1/2c, and May at 35 1/2c per bu.

OATS.—Market quiet. Quoted at 29c for No. 2 mixed, 28c for light mixed, and 27 1/2c for No. 3 mixed.

BARLEY.—The range is 1 10 1/2 to 25c per cental for fair to good, and 50 to 100c per cental higher for choice. Market quiet. Receipts for the week, 13,950 bu.; last week, 10,686; shipments, nothing. Stocks in store, 50,877 bu.; last week, 58,374 bu.; last year, 72,611 bu.

FEED.—Wheat quoted at \$1.04 1/2 to \$1.06 per ton for winter wheat and middlings at \$1.04 to \$1.06.

MEAT.—Market steady. Quoted at 52c for No. 1, and 50c for No. 2.

CLOVER SEED.—Dull and weak. Prime quoted at \$1.04 to \$1.05 for spot, and \$1.05 for February and March deliveries. No. 2 quoted at \$1.04 per bu.

BUTTER.—Choice dairy scarce and in demand at 19 1/2c; fair to good, 14 1/2c; creamery, 20 to 22c. Market overstocked with ordinary lots which are very hard to get rid of.

CHEESE.—Quoted at 12 1/2 to 15c for full cream Michigan, and 10 1/2 to 13c for New York. Market quiet.

HOGS.—The market firm at 14 1/2 to 15c for fresh receipts. Pickled, 12 to 14c. Receipts lighter.

BEEF.—Steady at 25 to 30c per lb., as to quality.

HONEY.—Market dull; now quoted at 16 1/2c for choice comb in frames. Extracted 10 to 12c.

FOREIGN FRUITS.—Lemons, Messina, \$3.00; oranges, Florida, \$3.00 to \$3.50; bananas, yellow, bunch, \$1.50 to \$2.00; pineapples, \$2.00 to \$2.50; for fancy, Malaga grapes, \$2.50 to \$3.00 per bu.

SALT.—Michigan, 80c per bu. in car lots, or 85c in 10-bu. lots; dairy, \$1.00 to \$1.10 per bu.; Ashton quarter sacks, 72c.

HAY AND STRAW.—Market quiet. Timothy 11 1/2 to 12 1/2c for car lots; small lots, 11c; clover, mixed, \$1.00 in car lots; straw, \$5.00 in car lots.

HIDES.—Green city, 1 1/2 to 2c per lb., country, 1 1/4 to 1 1/2c; cured, No. 1, 6c; No. 2, 4c; calf, No. 1, 6c; No. 2, 4c; veal skin, 4c; runners and No. 2, 2 1/2 to 3c; sheep-skins, 50c to \$1.25 as to quantity of wool.

BEANS.—Quoted at \$1.00 per bu. for city plucked mediums; unpecked quoted at \$1.00 and 12 1/2c per bu. These prices are for car lots. The market is very dull.

POTATOES.—Market quiet. Car lots quoted at 25 to 28c per bu.; store lots, 30 to 35c per bu.

PEAS.—Wisconsin blue quoted at \$1.00 to \$1.05 per bu.

APPLES.—Quoted at \$1.00 to \$1.05 per bu. for country apples, and \$1.05 to \$1.10 for extra stock. Market very quiet.

CRANBERRIES.—Quoted at \$5.00 to \$6.00 per bu. for Cape Cod, or \$3.50 to \$4.00 per bu.; Jersey, \$2.50 to \$3.00 per bu., or \$2.00 to \$2.50 per bu.

POULTRY.—Dressed quoted as follows: Turkeys, 12c; ducks, 10c; geese, 80c; chickens, 9c. Live quoted as follows: Old roosters 30c; fowls, 6c; spring chickens, 9c; ducks, 9c; turkeys, 10c. Receipts are light.

ed, and are dull and weak. Quotations in this market are as follows:

Meat, now..... 12 1/2 @ 13 1/2
Family..... 12 1/2 @ 13 1/2
Pork clear..... 14 1/2 @ 15 1/2
Lard in kegs, 5 lb..... 7 1/2 @ 8 1/2
Hams, 5 lb..... 10 1/2 @ 11 1/2
Shoulders..... 10 1/2 @ 11 1/2
Choice bacon, 5 lb..... 10 1/2 @ 11 1/2
Extra mess beef, now per bu..... 7 1/2 @ 8 1/2
Pork hocks, 5 lb..... 8 1/2 @ 9 1/2
Dried beef hams..... 8 1/2 @ 9 1/2
Tallow, 5 lb..... 4 1/2 @ 5 1/2

HAY.—The following is a record of the sales at the Michigan Avenue scales for the week up to Friday noon, with prices per ton:
Monday—18 loads: Four at \$12.50 and \$13; two at \$14, \$13 and \$11; one at \$15, \$14.50 and \$13.
Tuesday—3 loads: One at \$14, \$13 and \$11.
Wednesday—22 loads: Five at \$13.50; four at \$14; two at \$15; two at \$16; one at \$17; one at \$18; one at \$19; one at \$20; one at \$21; one at \$22; one at \$23; one at \$24; one at \$25; one at \$26; one at \$27; one at \$28; one at \$29; one at \$30; one at \$31; one at \$32; one at \$33; one at \$34; one at \$35; one at \$36; one at \$37; one at \$38; one at \$39; one at \$40; one at \$41; one at \$42; one at \$43; one at \$44; one at \$45; one at \$46; one at \$47; one at \$48; one at \$49; one at \$50; one at \$51; one at \$52; one at \$53; one at \$54; one at \$55; one at \$56; one at \$57; one at \$58; one at \$59; one at \$60; one at \$61; one at \$62; one at \$63; one at \$64; one at \$65; one at \$66; one at \$67; one at \$68; one at \$69; one at \$70; one at \$71; one at \$72; one at \$73; one at \$74; one at \$75; one at \$76; one at \$77; one at \$78; one at \$79; one at \$80; one at \$81; one at \$82; one at \$83; one at \$84; one at \$85; one at \$86; one at \$87; one at \$88; one at \$89; one at \$90; one at \$91; one at \$92; one at \$93; one at \$94; one at \$95; one at \$96; one at \$97; one at \$98; one at \$99; one at \$100; one at \$101; one at \$102; one at \$103; one at \$104; one at \$105; one at \$106; one at \$107; one at \$108; one at \$109; one at \$110; one at \$111; one at \$112; one at \$113; one at \$114; one at \$115; one at \$116; one at \$117; one at \$118; one at \$119; one at \$120; one at \$121; one at \$122; one at \$123; one at \$124; one at \$125; one at \$126; one at \$127; one at \$128; one at \$129; one at \$130; one at \$131; one at \$132; one at \$133; one at \$134; one at \$135; one at \$136; one at \$137; one at \$138; one at \$139; one at \$140; one at \$141; one at \$142; one at \$143; one at \$144; one at \$145; one at \$146; one at \$147; one at \$148; one at \$149; one at \$150; one at \$151; one at \$152; one at \$153; one at \$154; one at \$155; one at \$156; one at \$157; one at \$158; one at \$159; one at \$160; one at \$161; one at \$162; one at \$163; one at \$164; one at \$165; one at \$166; one at \$167; one at \$168; one at \$169; one at \$170; one at \$171; one at \$172; one at \$173; one at \$174; one at \$175; one at \$176; one at \$177; one at \$178; one at \$179; one at \$180; one at \$181; one at \$182; one at \$183; one at \$184; one at \$185; one at \$186; one at \$187; one at \$188; one at \$189; one at \$190; one at \$191; one at \$192; one at \$193; one at \$194; one at \$195; one at \$196; one at \$197; one at \$198; one at \$199; one at \$200; one at \$201; one at \$202; one at \$203; one at \$204; one at \$205; one at \$206; one at \$207; one at \$208; one at \$209; one at \$210; one at \$211; one at \$212; one at \$213; one at \$214; one at \$215; one at \$216; one at \$217; one at \$218; one at \$219; one at \$220; one at \$221; one at \$222; one at \$223; one at \$224; one at \$225; one at \$226; one at \$227; one at \$228; one at \$229; one at \$230; one at \$231; one at \$232; 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